DOCUMENT RESUME

ED 100 689 88 SE 018 587

TITLE	Business Education 9-12, Environmental Education Guide.
INSTITUTION	Project I-C-E, Green Bay, Wis.
SPONS AGENCY	Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C. Wisconsin State Dept. of Public Instruction, Madison.
PUB DATE	[74]
NOTE	131p.
EDRS PRICE	MF-$0.75 HC-$6.60 PLUS POSTAGE
DESCRIPTORS	*Business Education; Conservation Education; *Environmental Education; Instructional Materials; Interdisciplinary Approach; Learning Activities; Natural Resources; Outdoor Education; Science Education; *Secondary Education; *Teaching Guides
IDENTIFIERS	Elementary Secondary Education Act Title III; ESEA Title III; Instruction Curriculum Environment; *Project I C E

ABSTRACT

This business education guide, for use at the secondary level, is one of a series of guides, K-12, that were developed by teachers to help introduce environmental education into the total curriculum. The guides are supplementary in design, containing a series of episodes (minilessons) that help to meet the growing need for environmental awareness through business communications. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Although the same concepts are used throughout the K-12 program, emphasis is placed on different aspects of each concept at different grade levels or in subject areas. This guide focuses on aspects such as living space, private ownership, and recycling paper. The 12 concepts are covered in one of the episodes contained in the guide. Further, each episode offers subject area integration, subject area activities, interdisciplinary activities, cognitive and affective behavioral objectives, and suggested references and resource materials useful to teachers and students. (Author/TK)

ED 100689

ENVI

BUSINES

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Robert J. Warpinski
Project I-C-E
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER

SE 018 587

PROJECT I-C-E
(Instruction-Curriculum-Environment)
1927 Main Street
Green Bay, Wisconsin 54301
(414) 468-7464

PROJECT STAFF

Robert Warpinski - Director

Robert Kellner Terrence Hess - Assistant Directors

George Howlett, Jr. - E. E. Specialist

Nancy Timm Lynn Kuehn - Secretaries

ALL RIGHTS RESERVED
These materials were produced pursuant
to a grant under Title III, E.S.E.A.
The Wisconsin Department of Public Instruction
Project No. 59-70-0135-4

Wisconsin Area "B" Regional Project
Serving All Schools in Cooperative Educational Service Agencies 3-8-9

Ludwig Petersen
Coordinator, C.E.S.A. #3

Kenneth Poppy
Coordinator, C.E.S.A. #8

John F. David
Coordinator, C.E.S.A. #9
Project Administrator

FORWARD TO PROJECT I-C-E ENVIRONMENTAL EDUCATION GUIDES

In 1969, the First Environmental Quality Education Act was proposed in the United States Congress. At the time of the introduction of that legislation, I stated:

"There is a dire need to improve the understanding by Americans of the ominous deterioration of the Nation's environment and the increasing threat of irreversible ecological catastrophe. We must all become stewards for the preservation of life on our resource-deficient planet."

In the three years since the Environmental Education Act was passed by the Congress, much has happened in the United States to reinforce the great need for effective environmental education for the Nation's young people. The intensive concern over adequate energy resources, the continuing degradation of our air and water, and the discussion over the economic costs of the war against pollution have all brought the question of the environmental quality of this nation to a concern not merely of aesthetics but of the survival of the human race.

The intense interest by the public in the quality of our lives as affected by the environment clearly indicates that we cannot just use incentives and prescriptions to industry and other sources of pollution. That is necessary, but not sufficient." The race between education and catastrophe can be won by education if we marshall our resources in a systematic manner and squarely confront the long-term approach to saving our environment through the process of education.

As the incessant conqueror of nature, we must reexamine our place and role. Our world is no longer an endless frontier. We constantly are feeling the backlash from many of our ill-conceived efforts to achieve progress.

Rachel Carson's theme of "reverence for life" is becoming less mystical and of more substance as our eyes are opened to much of the havoc we have wrought under the guise of progress. A strong commitment to an all-embracing program of environmental education will help us to find that new working definition of progress that is a pre-requisite to the continued presence of life on this planet.

- Senator Gaylord Nelson

PREFACE

Each person is a part of his environment. Man has done many things to alter it. Some of these changes deteriorated the quality of our environment. It is now time for each individual to try and reverse this trend. We, as teachers, also have a responsibility to our society. Through today's media, each student is aware of his environment and its quality. Now he wants to know how he can improve it.

This text contains lesson plans of varying possibilities for most of the business education curriculum. The lesson plans contain concepts and objectives, but more important it contains many suggested activities. The plans can be used in grades 9-12 in any type of school structure. These plans are set up for you to use a short exercise, mini-lessons, or mini-courses.

Listed in the plans are simulation games, timed writings, filmstrips and records, films and many resource publications. Many of us are constantly looking for a change of pace in the classroom and for relevant material. Many of the materials are excellent and useful.

Business and individuals are concerned about many of the problems of ecology: water, air and noise pollution, living space and population problems, depletion of material resources, cost-use planning, consumption and distribution, general auto-emission, water and air abatement, rationing and price freezing regulations, etc. We hope this text will help you meet the responsibility of preparing your students to meet environmental problems now and in the future.

ACKNOWLEDGEMENT

The interest and dedicated effort of the following teachers from Wisconsin Area "B" has led to the development of the Project I-C-E Environmental Education K-12 series:

D. C. Aderhold, Bonduel
Joan Alioto, Denmark
Mary Anders, Winneconne
Eugene Anderson, Peshtigo
James Anderson, Green Bay
John Anderson, Peshtigo
Peggy Anderson, Green Bay
Walter Anderson, Wausaukee
Angela Anthony, Gibraltar
Dr. Harold Baeten, St. Norbert, DePere
William Baggs, Shiocton
Anthony Balistreri, Howard-Suamico
Lowell Baltz, Weyauwega
David Bartz, Sturgeon Bay
Bonnie Beamer, Coleman
Robert Becker, Fox Valley Luth., Appl.
William Behring, Lourdes, Oshkosh
David Bell, Neenah
Marie Below, Clintonville
Lousene Benter, Gillett
Lillian Berges, Seymour
Laura Berken, Oconto Falls
Peter Biolo, W. DePere
Carmella Blecha, Green Bay
Merlyn Blonde, Shawano
Barbara Jean Bobrowitz, Green Bay
William Bohne, Kimberly
Gailen Braun, Lena
Joan Charnetski, Sevastopol
Clifford Christensen, Winneconne
Bob Church, Little Chute
Lee Clasen, Luxemburg-Casco
Kathryn Colburn, Algoma
Merle Colburn, Algoma
Bill Cole, Gillett
Willard Collins, Crivitz
Ronald Conradt, Shiocton
Ken Couillard, Hortonville

John Cowling, Niagara
James Curran, Green Bay
Sara Curtis, Green Bay
Nicholas Dal Santo, Pembine
Judy DeGrave, W. DePere
Carol DeGroot, Ashwaubenon
Duane DeLorme, Green Bay
Ellen DePuydt, Gillett
John DeWan, Green Bay
Robert H. Dickinson, Oconto
R. A. Dirks, Gillett
Roberta Dix, St. Joe's Acad., G.B.
Dennis Dobrzenski, White Lake
Darwin Eastman, Appleton
Linda Eiting, Appleton
Janet Elinger, Ashwaubenon
Phyllis Ellefson, Wash. Island
Raymond Emerich, Hortonville
Mike Ercegovac, Winneconne
Gery Farrell, Menasha
Keith Fawcett, W. DePere
Billie Feichtinger, Green Bay
Rev. Bruno Frigo, Abbot Pennings, DePere
Ann Fuhrmann, Marinette
Raymond Gantenbein, Green Bay
Dona Geeding, Menasha
Armin Gerhardt, Appleton
Leroy Gerl, Oconto
Jack Giachino, Seymour
Rev. Gordon Gilsdorf, Sacred Heart, Oneida
Mike Gleffe, St. Matthews, Green Bay
Lillian Goddard, Coleman
Charles Gostas, Freedom
Karen Grunwald, St. James Luth., Shawano
Michael Haasch, Pulaski
Sr. Barbara Haase, St. Bernard, G.B.
Janelle Hagerty, Resurrection, G.B.
Robert J. Haglund, Green Bay

Robert Haen, Luxemburg-Casco
Donald Hale, Winneconne
Lee Hallberg, Appleton
Raymond Hammond, Hortonville
Russ Hanseter, Seymour
Herbert Hardt, Gibraltar
Emmajean Harmann, Sevastopol
Bill Harper, Lena
Beth Hawkins, Xavier, Appleton
Mike Hawkins, Xavier, Appleton
Terry Heckel, Marinette
Gary Heil, Denmark
Jerome Hennes, Little Chute
Robert Herz, St. James Luth., Shawano
Wendell Hillskotter, Weyauwega
Nannette Hoppe, Howard-Suamico
Joe Hucek, Pulaski
Catherine Huppert, DePere
Gene Hurrish, Green Bay
James Huss, Freedom
John Hussey, Green Bay
Sue Husting, Green Bay
Barbara Huth, Menasha
Sr. Claudette Jeanquart, St. Charles, Lena
Darrell Johnson, Hortonville
DeAnna Johnson, Denmark
Kathleen Jonen, Kaukauna
Sr. Lois Jonet, Holy Angels, Appleton
Ester Kaatz, Wausaukee
Paul Kane, Ashwaubenon
Ken Kappell, St. Alousius, Kaukauna
Kris Karpinen, W. DePere
Mel Kasen, Gibraltar
Ken Keliher, Appleton
Mary Chriss, Hortonville
Mike Kersten, Suring
George Kreiling, Marinette

James Krenek, Coleman
Bernadyne King, Neenah
Everett Klinzing, New London
Douglas Koch, Cath. Cent., Marinette
Frank Koehn, Resurrection, G.B.
Lynn Koehn, Pulaski
Jack Koivisto, Green Bay
Fred Krueger, Oshkosh
Fritz Krueger, Oshkosh
Jim Krueger, Winneconne
Ervin Kunesh, Marinette
Sr. Mary Alyce Lach, Cathedral, G.B.
Thomas LaFountain, Appleton
Steven P. Lapacz, Resurrection, G.B.
Mae Rose LaPointe, St. John High, L. Chute
Rosemarie Lauer, Hortonville
Kathleen LeBreck, Oconto
Robert Lee, Neenah
Don Leibelt, Green Bay
Phillip Lewicki, Gillett
Harold Lindhorst, St. Martin Luth., Clint.
Edward Linn, Appleton
John Little, Winneconne
Dennis Lord, Little Wolf
Ellen Lotz, W. DePere
Jean Lucier, Ashwaubenon
Judy Luedtke, St. Rose, Clintonville
Roy Lukes, Gibraltar
Sr. Anna Maar, St. Philips, G. B.
James Maki, Sturgeon Bay
Doris Malcheski, Howard-Suamico
Donald Marsh, Bonduel
Joyce Mateju, Algoma
Mary Mathis, Denmark
Margaret McCambridge, White Lake
Judy McGown, Green Bay
Kathleen McMahon, Green Bay
Margaret McMahon, Little Chute
Rick Menard, Little Chute
Priscilla Mereness, Wrightstown
Robert Meyer, Neenah

Richard Minten, W. DePere
David Miskulin, Goodman
Wendell Mitchell, Green Bay
Sharon Moore, Pulaski
Gloria Morgan, Linsmeier, G.B.
Lyle Nahley, Green Bay
Arnold Neuzil, Shiocton
Jim Nuthals, Lourdes, Oshkosh
Dorothy O'Brien, Wausaukee
Mildred O'Connell, Green Bay
Don Olsen, Shawano
Neil Olsen, Pulaski
Jean Marie O'Malley, Green Bay
Terry Otto, St. John Luth., Suring
Carl Paquet, Denmark
Ed Patschke, Menasha
Arthur Paulson, Oconto Falls
David Paulus, Neenah
George Pederson, Southern Door
AnnaMay Peters, Florence
Connie Petersen, St. Martin Luth., Clint.
Paul Plantico, Green Bay
Gene Ploetz, Kaukauna
Virginia Pomusl, White Lake
Willard Poupore, Little Chute
Marie Prochaska, Lena
Christine Proctor, Wausaukee
Rosemarie Rafath, Clintonville
Mark Reddel, St. Martin Luth., Clint.
Jack Rickaby, Hortonville
William Roberts, Sturgeon Bay
Gordon Rohloff, Oshkosh
Gladys Roland, Little Wolf
Ben Roloff, Howard-Suamico
Jack Rosenthal, Lourdes, Oshkosh
Kathryn Rowe, Appleton
Roger Roznowski, Southern Door
Mary Margaret Sauer, Menasha
Elmer Schabo, Niagara
Edwin Schaefer, Kaukauna
William Schaff, St. Joseph, Appleton

Arthur Schelk, Suring
Greg Schmitt, Cathedral, G.B.
Larry Schneider, DePere
Ron Schreier, Omro
Allan Schuh, Pulaski
Janet Serrahn, Sevastopol
Carolyn Stoehr, New London
Calvin Siegrist, Howard-Suamico
Peter Skroch, Oconto Falls
Mary Smith, Green Bay
Lee Smoll, Little Chute
David Soltesz, Crivitz
Bruce Sonnenberg, Neenah
Beverly Splitgerber, Green Bay
Wayne Splitgerber, Green Bay
Doris Stehr, Mt. Calvary Luth., Kimberly
Bill Stillion, Shawano
Ginger Stuvetraa, Oshkosh
Judy Sweedy, Denmark
Richard Switzer, Little Chute
Sr. Dorothy Marie Tappa, Xavier, Appl.
Nancy Tebo, Neenah
Jackie Thiry, Denmark
John Torgerson, Kewaunee
Clarence Trentlage, Freedom
Carol Trimberger, Kewaunee
Jack Twet, Freedom
Tim Van Susteren, Holy Name, Appleton
Mary Wadzinski, Howard-Suamico
Marion Wagner, Gillett
Ruth Ward, Crivitz
Cathy Warnack, White Lake
Susan Weller, Green Bay
Dallas Werner, Kaukauna
Lila Wertsch, St. Margaret Mary, Neenah
Ruth Windmuller, Green Bay
Tom Weyers, Cathedral, Green Bay
James Wiza, DePere
Ralph Wohlt, New London
Warren Wolf, Kimberly
Peggy Wolfgram, Pulaski

DIRECTIONS FOR USING THIS GUIDE

This guide contains a series of episodes (mini-lesson plans), each containing a number of suggested in and out of class learning activities. The episodes are built around 12 major environmental concepts that form a framework for each grade or subject area, as well as for the entire K-12 program. Further, each episode offers subject area integration, multidisciplinary activities, where applicable, both cognitive and affective behavioral objectives and suggested reference and resource materials useful to the teacher and students.

1. This I-C-E guide is supplementary in design--it is not a complete course of study, nor is its arrangement sequential. You can teach environmentally within the context of your course of study or units by integrating the many ideas and activities suggested.

2. The suggested learning activities are departures from regular text or curriculum programs, while providing for skill development.

3. You decide when any concepts, objectives, activities and resources can conveniently be included in your unit.

4. All episodes can be adapted, modified, or expanded thereby providing great flexibility for any teaching situation.

5. While each grade level or subject area has its own topic or unit emphasis, inter-grade coordination or subject area articulation to avoid duplication and overlap is highly recommended for any school or district seeking effective implementation.

This total K-12 environmental education series is the product of 235 classroom teachers from Northeastern Wisconsin. They created, used, revised and edited these guides over a period of four years. To this first step in the 1,000 mile journey of human survival, we invite you to take the second step--by using this guide and by adding your own inspirations along the way.

PROJECT I-C-E TWELVE MAJOR ENVIRONMENTAL CONCEPTS

1. The sun is the basic source of energy on earth. Transformation of sun energy to other energy forms (often begun by plant photosynthesis) provides food, fuel and power for life systems and machines.

2. All living organisms interact among themselves and their environment, forming an intricate unit called an ecosystem.

3. Environmental factors are limiting on the numbers of organisms living within their influence. Thus, each ecosystem has a carrying capacity.

4. An adequate supply of clean water is essential to life.

5. An adequate supply of clean air is essential for life.

6. The distribution of natural resources and the interaction of physical environmental factors greatly affect the quality of life.

7. Factors such as facilitating transportation, economic conditions, population growth and increased leisure time influence changes in land use and population densities.

8. Cultural, economic, social, and political factors determine man's values and attitudes toward his environment.

9. Man has the ability to manage, manipulate and change his environment.

10. Short-term economic gains may produce long-term environmental losses.

11. Individual acts, duplicated or compounded, produce significant environmental alterations over time.

12. Each person must exercise stewardship of the earth for the benefit of mankind.

A "Concept Rationale" booklet and a slide/tape program "Man Needs His Environment" are available from the I-C-E RMC to more fully explain these concepts.

TABLE OF CONTENTS

CONCEPT — TOPIC — PAGE NO.

GENERAL BUSINESS and CONSUMER ECONOMICS

CONCEPT	TOPIC	PAGE NO.
1	Source and Use of Electrical Energy	7
2	Balance of Nature	9
3	Living Space	11
4	Water Pollution	13
5	Air Pollution	15
6	Natural Resources vs. Business	17
7	Economic Growth and Change	19
8	Economic Growth vs. Environmental Quality	21
9	Solid Waste Management	23
10	Environmental Gains vs. Losses	25
11	Depletion of Resources	27
12	Land Use Planning	29

TYPING I, II, PERSONAL

CONCEPT	TOPIC	PAGE NO.
1	Problem of Power Consumption	31
2	A Typewriter Ecosystem	35
3	Business Education Class Capacity	37
4	Polluted Water	39
	An Appreciation of Water	43
6 & 7	Agricultural Land Resource Use	55

CONCEPT	TOPIC	PAGE NO.
8	Land Use Conflict	61
	Humanistic Environmental Attitude	65, 69, 71
9	Management of Environmental Change	75
11	Environmental Participation	79, 83
12	The Ethics of Land Use	91, 95, 99

SHORTHAND

1	Power Consumption	101
2	Balance of Nature	105
3	Population Demands	107
4	Water Quality Concerns	109
5	Air Pollution Concerns	111
6	Depletion and Abuse	113
9	Destroying Natural Resources	117
10	Economic Exploitation	119
11 & 12	Seeking Solution to Pollution Problems	121

BOOKKEEPING

2	Achieving Stability	125
3	Carrying Capacity	127
6	Profit Analysis and Plant Location	129
7	Leisure Time - Business	131
8	Recycling	133

CONCEPT	TOPIC	PAGE NO.
9	Technology and Growth	135
10	Economic Depreciation	137
12	Private Ownership	139

CLERICAL & SECRETARIAL PRACTICE

1	Office Consumption of Electricity	141
6	Recycling Paper	143
11	Waste of Supplies	145
12	Identification/Action on Polluters	147

Environmental:

Integrated with: BEST COPY AVAILABLE

CONCEPT NO. 1 - Energy

SUBJECT Business Education

ORIENTATION Source and Use of Electrical Power

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Through bulletin board and discussion trace sun energy use by any selected business.	A. In groups, students prepare bulletin board material as to sun energy. 1. Is there any human or business activity that does not need sun energy-or is there a business under the sun that does not use sun energy. 2. Why we need green plants to make sun energy useful. 3. What is happening to earth's green plants?	A. Power companies at local level. B. Outside reading: 1. Sun energy into electrical power. 2. New developments into energy for individual and business. C. Speaker from local greenhouse.
Affective: Through participation in activity, shows appreciation for sun energy and green plants for survival of man and everyday activities.	B. Panel discussion on how business could use sun energy directly. 1. Solar cells - development. 2. Solar power plants. 3. As solar power developed, how other forms of energy will be affected.	
Skills Used: 1. Develop materialistic and functional display of energy materials. 2. Panel discussion by student leaders or volunteers.		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Place In The Sun and Living World, Darling, Lois & Louis, Morrow, 1968, $3.95 Check Reader's Guide for problems of international sources - Energy and Transportation: Wall Street Journal, Business Week, U. S. News & World Report, Fortune Magazine Audio—Visual: Film: Sun's Energy, BAVI, #6949 Petroleum Association's films and filmstrips, Madison, WI Community: Local representative of power company as speaker Petroleum Association speaker Gas company representative Local florist	

Environmental:

CONCEPT NO. 2 - Ecosystem

ORIENTATION Balance of Nature

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Orally list three industrial products that could be harmful to our ecosystem.

Affective:

Curiosity aroused as he sees industry's effect on our ecosystem.

Skills Used:

1. Critical analysis of material.
2. Understanding of interaction between plants, animals and decay organisms.
3. Letter writing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. What examples of air or water pollution could upset our ecosystem which consists of plants as food energy producers, animals as energy consumers and decay organisms recycling organic matter for plant use.

B. Lead students in discussion of industries' effect on our ecosystem.
   1. Supplementary - How certain products could be harmful to our delicate balance of nature--uninvited additions.

C. Study economic vs. social environmental costs of agri-business use of land and soft pesticides.

D. Introduce concept of regulatory agencies, enforcing environmental control regulations:
   1. FDA
   2. Dept. of Agriculture
   3. EPA
   4. DNR

(Continued)

Outside or Community:

A. Use library to gather information for newspapers--articles that give account of local/regional air, water, noise pollution that has an effect on our ecosystem. Give extra credit for students' bringing in information.

B. Invite a representative from FDA (USDA) to talk on cyclamates or other food additives and to answer questions that students have prepared.

SUGGESTED RESOURCES

Publications:

Basic Speech Experiences,
Clark Publishing Company.
Introduction to the study of
Animal Population, University
Of Chicago Press
USDA manuals on pesticides
Farm journals - articles on
pesticides

Audio–Visual:

Overhead transparency on
additives and how they are used
Film:
Gifts, ICE RMC, Film #280
Kit:
Crisis of the Environment, ICE
RMC, KT #6

Community:

DNR
Department of Agriculture rep.

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

4. Develop statements.
    a. Effect of DDT on cows' milk.
    b. Effect of mercury contamination in fish and consumers.

E. Introduce additives that man knowingly uses in foods as opposed to uninvited additives shown on front page.

F. Discuss "How Man Has Destroyed the Balance of Nature in the Animal Kingdom."

G. View filmstrips pertaining to the respective discussion area.
    1. Crisis of the Environment

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 3 - Carrying Capacity

ORIENTATION Living Space

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Identify and research problems of living space as related to population growth rates.

Affective:

Develop an awareness of living space problems due to over-population and other related problems when population growth declines to zero or less.

Skills Used:

1. Research.
2. Discussion.
3. Listening.
4. Reporting.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A.
    1. View either film or filmstrip.
        a. Cities, U.S.A.
        b. The Best We Can Do
        c. Boomsville
    2. Discuss visual materials and form committees to research various large cities and their planning problems.
        a. Committees report to class on their research.
        b. Develop concensus list of major concerns.

B. Discuss implications of varying population growth rates on business economy.

Outside or Community:

A. Invite city/county planner to discuss planning problems.

B. Invite clergy to speak on pros and cons of birth control and family planning in connection with population growth and community planning.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Reference books, magazines and newspapers **Audio–Visual:** Films: The Best We Can Do, ICE RMC, Film #180 Boomsville, ICE RMC, Film #400 Kit: EQ Index, National Wildlife Federation, ICE RMC, KT #9 Filmstrip: Cities, U.S.A., ICE RMC, FS St 21 **Community:** City planner Clergyman	

E. S. E. A. Title III – PROJECT I-C-E 59-70-0135-4

Environmental:

CONCEPT NO. 4 - Water

ORIENTATION Water Pollution

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Research and give a written report of their findings on water pollution in relationship to local business and agriculture production.

Affective:

Through participation, demonstrate an awareness of business, farming and societal need for water conservation.

Skills Used:

1. Researching.
2. Listening.
3. Discussion.
4. Reporting.
5. Summarizing-condensing.
6. Interviewing.

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Students discuss the idea: "Business must provide some type of water pollution abatement".
   1. The idea of "Costs vs. Pollution" should be presented to class.
   2. Class to view films:
      a. The Stream
      b. The Gifts
   3. Prepare a question sheet concerning the films.

B. Use Ecology: Water Pollution from ICE RMC, Kit #12.

C. View filmstrip: Soaps, Detergents and the Environment, ICE RMC, FS St 15

D. Class divided into groups to alternate playing Dirty Water game.

E. Students to research/prepare a paper showing the types and reasons for water pollution in the local area.

Outside or Community:

A. Field trip to local sewage plant.

B. Secure a speaker on water pollution or abatement problem.

C. Have groups select 2 or 3 people to report to the class their interview with management of local firms for future federal stand aids and problems which will be encountered in meeting these requirements:
   1. What is your company doing to diminish pollution?
   2. What are government standards?
   3. Who pays the cost?
   4. Time is of essence.
   5. Plan of approach in starting action.

SUGGESTED RESOURCES

Publications:

Water Fit To Use, Carlson & Day, 1966
Water Pollution, G. Berg, Scientist's Institute
EPA guidelines
DNR publications, Wisconsin Conservation Bulletin
Local newspapers

Audio–Visual:

Films:
 The Gifts, ICE RMC, Film #280
 The Stream, ICE RMC, Film #320
Filmstrips:
 Water Pollution, NEA
 Soaps, Detergents and the Environment, ICE RMC, FS St 15
Kit:
 Ecology: Water Pollution, ICE RMC, KT 12
Game:
 Dirty Water, ICE RMC, SG 3

Community:

DNR
Local university
Fish factory personnel
Cheese plants
Paper/pulp mills

CONTINUED OR ADDED LEARNING ACTIVITIES

Environmental:

CONCEPT NO. 5 - Air

ORIENTATION Air Pollution

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Identify area or regional industries having severe problems with air pollution.

List five things that can be done to combat air pollution.

Affective:

Through participation in scheduled activities, shows concern for maintaining pollution-free air.

Skills Used:

1. Discussion techniques.
2. Observation of plants.
3. Research methods.
4. Secretarial recording of material.
5. Construction (typing) of report.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Identify area industries having severe problems of air pollution.
   1. Pulp and paper
   2. Power plants
   3. Foundries
   4. Other industries

B. Teacher could put the following material on blackboard or transparency as major contributors to air pollution.
   1. Automobiles - 60%
   2. Ind. Plants - 16%
   3. Power Plants - 13%
   4. Heating - 7%
   5. Incinerators

C. View one of the films listed on other side.

D. What measures are used by agencies to combat air pollution. (Group research)
   1. Write to Attorney General who uses public nuisance laws against industries.
   2. Bureau of solid wastes--under DNR--open burning in dumps.

(Continued)

Outside or Community:

A. Student observation of industries that contribute to air pollution in locality. From this observation, students would report orally in class about what they observed. A class reporter could record and pass out summary sheets in one of the next class sessions.
Assignment:
From newspapers or research materials, students obtain material or methods used to combat air pollution. From this research, write approximately a 200-word report concerning "The Reducing of Air Pollution".

SUGGESTED RESOURCES

Publications:

Vanishing Air, Ralph Nader Study Group, Grossman Pub., 1970

Fresh Air, from G. Howlett, ICE RMC

Survival Hand Book, Doug LaFollette Pub., 1971

Wisconsin Conservation Bulletin and Federal Standards (Wisc. Senators), Washington, D. C.

Audio–Visual:

Films:
  With Each Breath, Health Ed. Service, Albany, New York
  Air Pollution - Take A Deep Breath, National Medical Aides, Visual Center, Georgia
  Breathe at Your Own Risk, Modern Talking Picture Service, Chicago
Filmstrip:
  Air Pollution and You
Kit:
  EQ Index, ICE RMC, KT 9

Community:

Local pollution inspector
Businessmen from:
  Paper mills
  Foundries
  Power plants
DNR representative

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

3. Research in library federal legislation aims to severely limit automobile exhaust emission.
4. DNR authority and legislation.

E. What can you as an individual do to combat air pollution?
   1. Use car only when necessary.
   2. Don't burn leaves or trash.
   3. Keep car well tuned.
   4. Stop smoking.
   5. Give up gas-powered lawn mower, snowmobiles.
   6. Use less products that require factories to burn coal to produce products.
   7. Minimum horse power for auto.
   8. Shut off car engine when long stops made.
      a. Waiting for train at crossing.
      b. Deliveries being made.

Environmental: Integrated with:

CONCEPT NO. 6 - Resources **SUBJECT** Business Education

ORIENTATION Natural Resources vs. Business **TOPIC/UNIT** General Business and Consumer Economics

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Identify local business use of natural resources and report orally or in writing on degree of depletion threat.	A. 1. List the various natural resources found and used in the businesses of the community. a. Organize into small study groups (3-4 in a group). b. Divide the local businesses into clusters that may be similar or dependent on others. 2. Collect materials from classroom library/school library. a. Each student spend at least one period in the library. b. Organize data. 3. Get the reactions from all groups in a classroom discussion on what they think the role of business and industry is in (Continued)	A. Visit local industry to find out where they obtain natural resources and what they are doing to conserve the ones they use. B. Have community leaders in government and industry speak to class. 1. Give views on the effect natural resources have had on the area and in particular on the community.
Affective: Becomes aware of the concern business and industry have toward preserving natural resources as indicated by report.		
Skills Used: 1. Researching. 2. Discussion. 3. Reporting. 4. Analyzing data. 5. Organization of data.		

SUGGESTED RESOURCES

Publications:

General Business, Southwestern Publishing Co.

Audio–Visual:

Film:
- Recycling, Modern Talking Picture Service, Chicago

Filmstrips:
- Our Part in Conservation, McGraw-Hill
- Our Vanishing Land, McGraw-Hill

Game:
- Ecology: The Game of Man and Nature, ICE RMC, SG 2

Kit:
- EQ Index, ICE RMC, KT 9

Community:

- Local organizations and clubs
- State DNR
- Local business/government personnel
  - Electrical utility
  - Natural gas company
  - Oil company
  - Coal company

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

regard to our natural resources.

4. Identify resources as to renewable and non-renewable. Also include the importance of the resources to any business. Include this in report.

Environmental:

Integrated with:

CONCEPT NO. 7 - Land Use

SUBJECT Business Education

ORIENTATION Economic Growth & Change

TOPIC/UNIT General Business & Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Orally list the types of transportation, industry and population in community at its founding.

Affective:

Through discussion, shows awareness of local historical changes, possible reasons for such changes and how these have influenced the local environment.

Skills Used:

1. Library work.
2. Discussion.
3. Organization.
4. Beginning land use planning.
5. Listening.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Divide class by committees. Each committee will present a short report on one of the following topics about the community.
   1. Why it was started.
   2. Why this location.
   3. What were the transportation, economic conditions and population at that time?
   4. What businesses originally started here?
   5. How was the land used?

B. View filmstrip: Transportation: Where Do We Go From Here?
   1. Discuss transportation needs of business and industry.
   2. Offer solution to increased use of trucks.

Outside or Community:

A. Resource person on zoning and future land use.

B. Use library for research.

C. Current articles from newspaper on zoning and land use.

D. Speaker from local Chamber of Commerce to talk on history of community.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Give Earth a Chance, ICE RMC, VF Scientist's Institute for Public Information, ICE RMC, VF A Handbook for Environmental Action, ICE RMC, VF **Audio–Visual:** Filmstrip: Transportation: Where Do We Go From Here?, ICE RMC, FS St 20 **Community:** Chamber of Commerce Local college/university environmental instructor DNR representative Planning/Zoning commission Wis. Dept. of local affairs and development	

Environmental:

Integrated with:

CONCEPT NO. 8 - Values and Attitudes

SUBJECT Business Education

ORIENTATION Economic Growth vs. Environmental Quality

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: State in writing the current level of Gross National Product, the percent of growth in the last year and the definition and purpose of GNP.	A. Students prepare charts showing GNP over the past 40 years. 1. Charts should define GNP. 2. Charts should plot GNP over time. B. Students write an essay (2 page maximum) relating resources to GNP. 1. List natural resources used up. 2. Capital needs to provide goods and services. 3. Human resources needed. C. Discuss how the growth of GNP has reduced the quality of our environment. D. Write letters to U.S. Senators concerning current legislation on environment.	A. Use library for research. B. Students could hold a panel discussion on the quality of life in local community.
Affective: Demonstrates through participation an awareness that as GNP increases a greater stress is placed on our natural resources and environment.		
Skills Used: 1. Preparing charts & graphs. 2. Composing & relating facts to concepts. 3. Problem solving. 4. Group discussion. 5. Writing letters.		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Bureau of Census Report U. S. News and World Report Wall Street Journal Business Week Fortune **Audio—Visual:** Filmstrip: Saving What's Left, ICE RMC, KT 28 **Community:** University economics professors	

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 9 - Management

ORIENTATION Solid Waste Management

Integrated with:

BEST COPY AVAILABLE

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

Through inquiry, activities and discussion, concludes that solid waste management is major social concern of both business and industry.

Affective:

Acknowledges the many problems in disposing of solid waste and suggests possible solutions.

Skills Used:

1. Research projects.
2. Group participation.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A.
   1. In consideration of solid waste management, view any of these films:
      a. What's New In Solid Waste Management?
      b. Recycling
      c. Garbage
   2. Student-teacher discussion on films and outside resource and community activities.
   3. Write a summary on the discussion.

B. Industrial plants (discuss):
   1. What is being done with the waste?
   2. How does waste affect a firm's profit?
   3. What are some ways of reducing wastes?

Outside or Community.

A. Sewerage treatment plants:
   1. Visit local plant.
   2. How are solids disposed of?
   3. Personnel of plant to explain his plant's operation to class.

B. Invite local sanitary engineer/official to discuss either:
   1. Solid waste disposal - no reusables (discuss)
      a. Burying of burnable materials.
      b. Open face dumps and burning.
      c. Operation of sanitary land fills.
   2. Solid waste - usable:
      a. Recycling, paper, glass, cans and iron products.
      b. Get local civic leader to explain recycling program.
      c. Visit a recycling plant.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Reference books, magazines and newspapers about products made and waste produced. DNR Bulletins and articles **Audio–Visual:** Films: *Garbage*, ICE RMC, Film #260 *What's New in Solid Waste Management?* and *Recycling*, Modern Talking Picture Service, Chicago **Community:** DNR personnel Business leaders Sewerage treatment engineer	

Environmental:

CONCEPT NO. 10 - Economic Planning

ORIENTATION Environmental Gains vs. Losses

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:

List and describe in-plant practices which can be harmful and helpful to the employees.

Affective:

Demonstrate understanding that industry can control pollution within a plant for the welfare of its employees and still maintain a fair profit.

Skills Used:

1. Discussion.
2. Participation.
3. Analysis of classroom participation.
4. Making judgments.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Discuss what products have been produced in mass quantity that could possibly cause long-term environmental losses.

B. Lead discussions on: Are these previously discussed industries and products more harmful or beneficial to society as a whole?

C. How harmful are in-plant practices to employees for some industries?
   1. Steel workers - sulfur dioxide poisoning.
   2. Agricultural workers - pesticides.
   3. Painters, dry cleaners - benzine odors.
   4. Textile workers - breathing lint particles.
   5. Miners - black lung disease.
   6. Migrant workers - the social environment includes their poor physical environment.

(Continued)

Outside or Community:

A. Speaker from industry on programs they are using to benefit society and their employees as a whole.

SUGGESTED RESOURCES

Publications:

Wisconsin Survival Handbook, ICE RMC

The User's Guide to Protection of the Environment, Paul Swantek, 1970

Audio–Visual:

Films:

Bulldozed America, Carousel Films, Inc., New York, NY

Air Pollution - Everyone's Problem, Modern Talking Picture Service, Inc., Chicago

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

D. Have students list programs that industries have developed to promote the health and safety of its employees.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental: **Integrated with:**

CONCEPT NO. 11 - Individual Acts **SUBJECT** Business Education

ORIENTATION Depletion of Resources **TOPIC/UNIT** General Business and Consumer Economics

BEHAVIORAL OBJECTIVES

Cognitive:
Choose an economic resource and explain through his choice of media, how individual consumption is eliminating this resource.

Affective:
Through report shows awareness that natural resources are limited and must be wisely used.

Skills Used:
1. Report preparing.
2. Speech presentation.
3. Analyzing data.
4. Organizing data.
5. Researching.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Group discussion:
  1. Status of available natural resources.
    a. Natural
      1) Surface land
      2) Within land
      3) Water areas
      4) Air
  2. Human resources.
  3. Capital.

B. How can natural resources be conserved?
  1. Recycling.
  2. Conservation.
  3. Basic need for product.

C. Students to prepare report on natural resources.
  1. They can choose their own type of media (oral, written, filmstrip).

* Note: Discussion format
1. Each discussion should have a clearly stated and developed goal.
2. Provide time for adequate summary to finalize the discussion.

Outside or Community:

A. Visit recycling companies for metal and glass.

B. Paper usage on large scale.
  1. Have a visitation to a paper company for reusable paper.

C. Get local groups to promote conservation.
  1. Does recycling pay?

D. Short research on what other parts of the country are doing on environmental study.
  1. Use library.

E. Field trips:
  1. Green Bay Packaging.
  2. Fort Howard Paper.
  3. U. S. Paper.
  4. Bergstrom Paper.
  5. Neenah Foundry.
  6. Rothe Foundry.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Community Ecological Organization, P. O. Box 844, Oshkosh, Wisconsin 54901	
Audio–Visual: Films: Urban Sprawl, ICE RMC, Film #430 Seeds of Destruction, BAVI Expanding City, BAVI Conservation of Natural Resources, BAVI Recycling, Modern Talking Picture Service, Chicago Kits: Conservation, ICE RMC, KT 8 Saving What's Left, ICE RMC, KT 28	
Community: Paper producing companies Local university instructors	

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION Land Use Planning

Integrated with:

SUBJECT Business Education

TOPIC/UNIT General Business and Consumer Economics

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Orally discuss present and future land use problems and write a one-page paper on "land ethics".	A. Divide students into small groups. 1. Compile a list of present land use problems of business. 2. Predict future land use problems of business. 3. Have a group discussion of present and future problems.	A. Have a person from local government speak on zoning laws, annexation, city ordinances and licenses that limit and regulate business concerns. B. Collect newspaper and magazine articles on restrictions of business use. 1. Have student give an extra credit report on these articles.
Affective: Shows appreciation for the problems of business in relationship to the concept of "land ethic".	B. Small groups geographically illustrate the land use of their own city. 1. Play the Land Use Game. C. Discuss and give sample questions of private gain vs. community service responsibility. 1. Industrial parks. 2. Write a one-page paper on "land ethics".	C. For a long-range report, students could note in a given area the type of land posted for No Trespassing. Contact owners to see why it is posted, as open areas for recreation are needed for population increase.
Skills Used: 1. Creative thinking. 2. Group discussion. 3. Research. 4. Writing. 5. Reporting facts. 6. Listening.		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Community Planning Handbook, ICE RMC
Sand County Almanac, Aldo Leopold

Audio—Visual:

Film:I
All of the People All the Time, BAVI
Kits:
The Land Use Game, Education Ventures, Inc., 1971
Urban Challenge-What Is A City? ICE RMC, KT 33
Filmstrip:
Cities, U.S.A., ICE RMC, FS St21
Game:
New Town, ICE RMC, SG 8

Community:

City Planning Commission
Speakers:
  City manager
  Representative from DNR
  City engineer

Environmental:

CONCEPT NO. 1 - Energy

ORIENTATION Problem of Power Consumption

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Perform timed typing and proofread environmental copy, set copy aside and compose answers to questions based on the material.

Affective:

Consider the implications of ever-growing demand for electrical energy and environmental impact.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Using attached copy, have students do timed typing exercises of one minute and three minutes.
   1. Proofread for errors and put copy away.
   2. Compose at the typewriter answers to the following questions:
      a) What is the major dilemma of increasing power needs?
      b) Why more power?

B. Discussion on "why more power?" in relation to business education:
   1. What kind of equipment was standard in Bus. Ed. classes 20 years ago?
   2. How has that equipment standard changed today?
   3. What is the end result?

Outside or Community:

A. Conduct a survey of students in high school on use of business machines at home.
   1. What kind of equipment do they have, i.e., typewriter, adding machine, other?
   2. What is the correspondence of electric versus manual?
   3. Form conclusion and relate to Concept 11 on "individual acts" of convenience, efficiency and speed versus contribution to power demands.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Introduction to Environment, ICE RMC, 110 Ca Planning for an Ecological Unit Course, ICE RMC, VF **Audio–Visual:** Film: Business Office, BAVI Game: Ecology: The Game of Man and Nature, ICE RMC, SG 2 **Community:**	

The growing public controversy over power pro- 10
duction has so far involved the construction of a par- 20
ticular electric power plant or the specific waste 30
discharge standards applied to the plants in a par- 40
ticular community. As these controversies grow in 50
number and intensity, the country may be forced to 60
come to grips with the central dilemma of all pres- 70
ent power production: that no matter what energy 80
source is selected, environmental costs are con- 90
siderable and will become severe and sometimes 100
irreversible if power production continues to ex- 110
pand much longer at its present rate. If this 120
dilemma is understood, then we may be ready to face 130
the fundamental question: Why more power? 138

From Scientist's Institute for Public Information,
"Environmental Cost of Electric Power", 1970.

Environmental: **Integrated with:**

CONCEPT NO. 2 - Ecosystem **SUBJECT** Business Education

ORIENTATION A Typewriter Ecosystem **TOPIC/UNIT** Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:
Develop a creative analogy between earth and a typewriter or office operations in essay form.

Affective:
Realizes meaning of an ecosystem and applies it to man-made and natural situations.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. When explaining the mechanical operations of a typewriter, ask the students to develop a creative analogy on how the typewriter functions as an ecosystem much like earth.
   1. Examples might be:
      a, Sun - earth, Electricity - typewriter
      b. Man-- earth, Man - typewriter
      c. Biotic community - earth, internal mechanism - typewriter, etc.
   2. Students draft essay copy of this analogy and type the copy.

B. A follow-up discussion on analogous problems related to a breakdown of any typewriter component to breakdown of any natural component.

Outside or Community:

A. Visit/Invite an office manager to discuss questions on an office ecosystem, the important consideration being:
   1. That there are all kinds of ecosystems.
   2. The role of individual components within any ecosystem.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: An Alternative Future for America II, ICE RMC, 100 Th **Audio–Visual:** Kit: The Environment of Man, ICE RMC, KT 2 (selected portions) **Community:** Local business office Office manager	

Environmental:

CONCEPT NO. 3 - Carrying Capacity

ORIENTATION Business Ed. Class Capacity

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:
Investigate, compile and type report on the carrying capacity of the typing class.

Affective:
Acquires an understanding of limits to any ecosystem through report analysis.

Skills Used:
1. Collection of data.
2. Analysis of data.
3. Composing report.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. As the concept of carrying capacity applies to any man-made or natural area, have students investigate and compile a typewritten report on the capacity of their classroom using the following outline in the form of questions.
   1. What limits the number of students in the class?
   2. What limits the number of learning stations in the room?
   3. What limits the number of typewriters in the room?
   4. What happens when any of the above items exceeds such limits?
   5. Have students compose and type their definition of "carrying capacity".

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Local, regional newspapers Magazines The Environmental Handbook, ICE RMC Environmental Cost of Electric Power, Scientist's Institute for Public Information, ICE RMC, VF **Audio–Visual:** Kit: Crisis of the Environment, ICE RMC, KT 6 **Community:**	

Environmental:

Integrated with:

CONCEPT NO. 4 - Water

SUBJECT Business Education

ORIENTATION Polluted Water

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Name specific areas of water pollution and its causes and list ways in which he and his classmates can help stop pollution.

Affective:

Awareness of the causes of water pollution and ways in which he can help stop pollution.

Skills Used:

1. Effective thinking.
2. Composition at the typewriter.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Show filmstrip on water pollution.

B. Students discuss filmstrip and apply their own experience.
   1. Evidence of lakes and river pollution.
   2. Possible causes of pollution.
   3. Steps they can take to help stop pollution.
   4. Steps they can take to encourage others to help stop pollution.

C. The above discussion points should be placed on the chalkboard. Each student then composes a report from the ideas discussed and listed.

D. Do timed exercises of copy provided. Set copy aside and compose at the typewriter answers to the question "What can you do about water pollution?"

Outside or Community:

A. Obtain articles from local newspapers and use as pre-class typing warmup.

SUGGESTED RESOURCES

Publications:

Timing Material, Madison Business College, Madison
What You Can Do About Water Pollution, ICE RMC, VF
Clean Water - It's Up To You, ICE RMC, VF

Audio-Visual:

Films:
  Lakes - Aging & Pollution, BAVI
  Water Pollution, BAVI
  What Are They Doing to our World?, BAVI
Kits:
  EQ Index, ICE RMC, KT 9
  Ecology: Water Pollution, ICE RMC, KT 12
Filmstrip:
  Environmental Pollution...Our World In Crisis, ICE RMC, FS St I

(Continued)

Community:

Local newspaper

CONTINUED OR ADDED LEARNING ACTIVITIES

AUDIO-VISUAL (Continued)

Games:
  Ecology: The Game of Man and Nature, ICE RMC, SG 2
  Dirty Water: The Water Pollution Game, ICE RMC, SG 3

Cleaning up America's polluted waters is a job 10
for government at all levels and for industry. But 20
both government and industry need citizen support and 30
encouragement. Often, informed public pressure is 40
the only way to get action. 46

There is no getting around the fact that water 56
pollution control costs money. It may mean larger 66
taxes. It may mean increased production costs for 76
many industries. In one way or another, these costs 86
must be borne by the taxpayer and the consumer-- 96
by our whole society. But these costs are small 106
as compared to the destructive costs of un- 114
controlled pollution, small compared to the costs 124
of running out of clean water. 130

Citizens in all walks of life can help to 140
clean up dirty water and to keep it clean. 147

From: U. S. Environmental Protection Agency,
"What You Can Do About Water Pollution", 1971.

Environmental:

Integrated with:

CONCEPT NO. 4 - Water

SUBJECT Business Education

ORIENTATION An Appreciation of Water

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES In-Class:	 Outside or Community:
Cognitive: Given environmentally-oriented manuscript copy, the student will prepare an acceptable manuscript and/or compose at the typewriter his response to specific concerns regarding water quality.	A. Manuscript: Prepare a typewritten manuscript using accepted manuscript rules for the copy "Water Pollution", attached. B. Select two of the ideas for maintaining quality of water from the attached listing "Water--7/10's of You" and compose at the typewriter your feelings about the necessity for implementing this practice, what you have done to specifically implement or what you have observed which tends to defeat a stated "good practice". 1. Compose your final copy from an initially-prepared rough draft. C. View film, The Gifts. 1. Compose at the typewriter a page of "impressions" in rough draft. 2. Edit and prepare final copy.	
Affective: Gain insight on the complexities of maintaining water quality and prompt positive conservation measures as evidenced by composed statements.		
Skills Used:		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: *You Are An Environment, Teaching/ Learning Environmental Attitudes* Noel McInnis, 1972 "Help! Give Earth A Chance" New York State Dept. of Environmental Conservation, Albany, New York **Audio-Visual:** Film: *The Gifts*, ICE RMC, Film #280 **Community:**	

WATER POLLUTION

Most of our water comes from, and returns to, the same place: the oceans. Oceanic evaporation returns to the earth's surface as rain and is recycled back to the ocean through the network of streams, rivers, and lakes. As the water is again evaporated, however, the pollution and waste that was carried to the sea by these streams, rivers and lakes remains. Thus water pollution is increasingly concentrated in the oceans. Considerable air pollution also becomes concentrated in the oceans, since some of it--but far from all of it--is washed out of the air by rain.

As pollution is concentrated in a body of water, it tends ultimately to reduce the amount of plant life which the water can sustain. This, in turn, has an effect on our planet's air, since nearly all the oxygen we breathe is produced by plants. A plant produces exactly as much oxygen during its lifetime as it will consume during the process of decomposition. Thus plants on the land surface of the earth produce only enough oxygen to provide for their own recycling.

Plant life at the ocean's surface, however, sinks when it dies and it does not reconsume the amount of oxygen it produced.

Therefore the oxygen which supports the planet's animal species is a "gift", as it were, from the oceans. As the oceans' capacity to sustain plant life is reduced by pollution, this "gift" is also reduced. The oxygen reserves of the planet are enormous, and we are in no early danger of oxygen starvation as a result of ocean pollution. But the pollution of our oceans cannot go on indefinitely. As we increasingly pollute our water, we increasingly borrow from the "principal" of our planet's oxygen reserves while at the same time reducing the planet's capacity to provide "interest" by "investing" in aquatic plant life. At some point, this will have to cease.

Credits: You Are An Environment, Noel McInnis, 1972, pp. 57-58.

WATER--7/10's OF YOU

1. Many detergents contain phosphate which is carried into our waterways and fertilizes and encourages the growth of water plants, such as algae. In the process of living, dying and decomposing, these unnecessarily abundant plants seriously deplete the available oxygen in the water--oxygen which is needed for purification and for maintaining the proper balance of animal and plant life.

   Use soap instead of detergents. If you insist on using detergents use those which are low in phosphate. As of January 1, 1971 New York State law requires that manufacturers indicate the phosphate content on detergent boxes. We cannot recommend non-phosphate detergents until research proves that the chemicals being substituted for phosphorous are not hazardous to you and your environment.

2. Do not use full amounts listed on detergent boxes in dishwashers and clothes washers. Keep reducing the amount until you determine the smallest amount necessary for your needs.

The following is a listing of phosphate contents released by the Federal Water Quality Administration on September 6, 1970. This list can be expected to change as additional projects are tested and as manufacturers alter the formulations of their products.

Type of Material	Product	Percentage Phosphates
Pre-Soaks	Biz	73.9
	Enzyme Brion	71.4
	Amway Trizyme	71.2
	Axion	63.2
Laundry Detergents	Blue Rain Drops	63.2
	Salvo	56.6
	Tide	49.8
	Amway SA-8	49.3
	Coldwater Surf	48.2
	Drive	47.4
	Oxydol	46.6
	Bold	45.4
	Cold Water All (powder)	45.4
	Ajax Laundry	44.6
	Cold Power	44.6
	Punch	44.2
	Dreft	41.9
	Rinso with Chlorine Bleach	41.0
	Gain	39.5
	Duz	38.3
	Bestline B-7	38.0
	Bonus	37.5
	Breeze	37.2
	Cheer	36.3
	Fab	34.8
	White King (with Borax)	34.7
	Royalite	21.7
	Instant Fel Soap	16.6
	Wisk (liquid)	14.2
	Par Plus	4.3
	Addit (liquid)	2.2
	Ivory Liquid	1.9

Laundry Detergents	Lux Liquid	1.9
	White King Soap	less than 1.0
	Cold Water All (liquid)	less than 1.0
Automatic Dishwasher Detergents	Amway	60.0
	Cascade	54.5
	All	54.0
	Calgonite	49.4
	Electrosol	34.8
Household Cleaners	Ajax All Purpose	28.5
	Mr. Clean	27.0
	Whistle	3.1
	Pinesol	less than 1.0
Miscellaneous	Snowy Bleach	36.4
	Borateem	less than 1.0
	Downy	less than 1.0
	Amway Dish Drops	less than 1.0

3. Don't put heavy paper, tissues, rags, disposable diapers, grease, solvents, medicines or other chemicals into toilets and sinks. These substances reduce the effectiveness of your community's sewage treatment facilities or your septic tank.

   Do not install or use sink garbage disposal units. The added organic material they put into our drains increases the load on sewage treatment facilities.

4. Toilets needlessly use approximately 5 gallons of water every time they are flushed. Reduce this amount by placing a brick in the water reservoir or by changing the reservoir float height. Neither technique will damage your plumbing.

5. Reduce your use of fertilizers and herbicides (weed killers) on your lawn. The runoff and seepage of these chemicals following rains pollute our streams and drinking water.

6. If you have a well, have your drinking water tested once a year.
7. Shovel and plow away snow and ice. Use sand in place of salt. Salts pollute our waters, kill street trees, and are inhaled by city dwellers when streets become dry. But don't go overboard with sand either...used in excess, it is washed away into storm sewers where it clogs mains as silt.
8. Promote regional sewage disposal systems which remove both organic and inorganic products. Eliminate cesspools and septic tanks, particularly around lakes and wells. Promote regional planning on a watershed basis. Form a watershed association.

   Promote the study of local and state water problems in your schools.
9. Organize group cleanups of the banks and channels of local streams and rivers.

   Promote local sub-division and agricultural erosion ordinances which prohibit erosion and subsequent siltation of our waterways. Insist on positive local zoning to prevent development on steep slopes, groundwater recharging areas, floodplains, marshes, and coastal wetlands.
10. Inform your local health official about evidence of water pollution in your area.

Credits: "Help! Give Earth a Chance", New York State Dept.
of Environmental Conservation, pp. 6-10

Environmental: **Integrated with:**

CONCEPT NO. 6 - Resources & 7 - Land Use **SUBJECT** Business Education

ORIENTATION Agricultural Land Resource Use **TOPIC/UNIT** Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT-CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Through typing tabulation and analysis of copy information, conclude that agricultural land as a resource is unevenly distributed and often converted to other uses.	A. Using attached copy, students set tabs for desired format and type ranking the counties according to the number of acres in farm use. B. Studying the statistics provided on copy, compose at the typewriter answers to the following questions: 1. Which county has the fewest farms? Do you know why? 2. According to data, which are the top ten counties in size of farms? 3. Why is farm land in Milwaukee County valued the most? 4. Counties are basically similar in size; why the difference in farm acres between counties?	A. Invite your Ag teacher to review your answers to questions for "B" in the "In-Class" activity.
Affective: As a result of activities, appreciate need for preservation of farm land versus urbanization tendencies.		
Skills Used:		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: World Almanac. 1970 census report. The Traffic Jam, ICE RMC The City as a Community, ICE RMC Wisconsin Blue Book **Audio–Visual:** Film: Boomsville, ICE RMC, Film #400 Kits: The Ecological Crisis, ICE RMC, KT 14 EQ Index, ICE RMC, KT 9 **Community:**	

NUMBER, SIZE AND VALUE OF FARMS IN WISCONSIN

BY COUNTY, 1969

County	No. of Farms	Land in Farms (acres)	% of Land Area in Farms	Av.Size Farm (acres)	Av. Value[1]	
					Per Farm	Per Acre
Adams.	463	133,413	32.3	288.1	$ 40,526	$ 140.64
Ashland. . . .	341	79,697	12.0	233.7	16,990	72.69
Barron	2,306	411,432	74.4	178.4	25,866	144.97
Bayfield . . .	492	104,912	11.2	213.2	18,753	87.94
Brown.	1,886	255,973	76.3	135.7	53,117	391.36
Buffalo. . . .	1,264	362,061	79.6	286.4	33,191	115.87
Burnett. . . .	563	109,309	20.3	194.1	20,630	106.25
Calumet. . . .	1,331	184,730	89.5	138.7	42,274	304.58
Chippewa . . .	2,083	438,246	67.3	210.3	30,558	145.24
Clark.	2,980	489,826	62.7	164.3	23,796	144.76
Columbia . . .	1,859	361,651	72.8	194.5	56,311	289.45
Crawford . . .	1,207	292,480	80.5	242.3	28,946	119.45
Dane	3,706	606,605	79.1	163.6	75,216	459.53
Dodge.	2,879	445,807	78.4	154.8	52,354	338.10
Door	1,278	177,909	56.6	139.2	31,593	226.94
Douglas. . . .	347	79,147	10.2	228.0	22,270	97.63
Dunn	2,026	420,204	76.8	207.4	31,245	150.64
Eau Claire . .	1,244	228,728	55.2	183.8	30,432	165.51
Florence . . .	104	27,903	8.9	268.2	24,894	92.78
Fond du Lac. .	2,429	386,913	83.4	159.2	50,773	318.75
Forest	158	48,543	7.5	307.2	21,371	69.55
Grant.	2,840	641,980	87.5	226.0	48,670	215.31
Green.	1,789	342,096	91.4	191.2	61,547	321.86
Green Lake . .	877	169,423	74.7	193.1	52,038	269.37
Iowa	1,552	391,075	80.2	251.9	54,871	217.82
Iron	66	18,257	3.8	276.6	28,750	103.93
Jackson. . . .	1,087	271,991	42.5	250.2	33,359	133.31
Jefferson. . .	2,073	276,129	76.5	133.2	49,105	368.65
Juneau	1,000	182,471	36.8	182.4	27,734	151.99
Kenosha. . . .	699	108,745	62.4	155.5	93,948	603.88
Kewaunee . . .	1,378	191,568	90.8	139.0	34,923	251.21
La Crosse. . .	1,024	214,628	74.4	209.5	44,674	213.14
Lafayette. . .	1,530	354,529	86.2	231.7	65,439	282.41
Langlade . . .	748	163,526	29.7	218.6	30,945	141.55
Lincoln. . . .	719	149,393	26.2	207.7	23,238	111.84
Manitowoc. . .	2,281	303,599	80.5	133.0	33,965	255.18
Marathon . . .	3,772	671,534	66.1	178.0	26,720	150.08
Marinette. . .	971	188,705	21.4	194.3	24,900	128.12
Marquette. . .	665	166,026	57.0	249.6	36,282	145.32
Menominee. . .	3	708	----	236.0	------	------
Milwaukee. . .	245	17,412	11.5	71.0	131,944	1,857.26
Monroe	1,883	336,490	62.6	194.6	31,678	162.76
Oconto	1,614	271,820	42.4	168.4	25,901	153.79
Oneida	118	46,653	6.6	395.3	70,315	177.84
Outagamie. . .	2,140	297,934	73.4	139.2	43,570	312.95
Ozaukee. . . .	759	105,037	69.7	138.3	78,104	564.38
Pepin.	548	124,139	82.6	226.5	30,660	135.34

County	No. of Farms	Land in Farms (acres)	% of Land Area in Farms	Av.Size Farm (acres	Av. Value Per Farm	Av. Value Per Acre
Pierce	1,652	309,056	81.8	187.0	$ 38,366	$ 205.07
Polk	2,101	377,974	63.4	179.9	26,447	147.01
Portage. . . .	1,352	300,563	58.3	222.3	39,199	176.33
Price.	775	154,533	19.2	199.3	17,662	88.58
Racine	1,020	140,480	65.2	137.7	83,768	608.22
Richland . . .	1,515	313,416	84.0	206.8	31,515	152.33
Rock	1,990	378,567	82.1	190.2	89,869	472.41
Rusk	980	212,623	36.7	216.9	24,149	111.30
St. Croix. . .	1,845	354,537	75.5	192.1	41,694	216.97
Sauk	2,044	420,175	78.0	205.5	43,153	209.92
Sawyer	329	77,976	9.7	237.0	29,207	123.23
Shawano. . . .	2,010	343,182	58.3	170.7	28,459	166.68
Sheboygan. . .	1,869	238,775	73.8	127.7	43,014	336.69
Taylor	1,437	283,981	45.5	197.6	21,771	110.16
Trempealeau. .	1,908	382,794	81.4	200.6	27,977	139.45
Vernon	2,503	407,404	79.4	162.7	26,572	162.25
Vilas.	66	12,075	2.2	182.9	49,115	268.45
Walworth . . .	1,354	264,246	74.2	195.1	96,145	492.65
Washburn . . .	461	114,957	22.0	249.3	26,799	107,47
Washington . .	1,432	186,302	67.9	130.0	58,985	453.39
Waukesha . . .	1,224	167,019	47.1	136.4	88,672	649.83
Waupaca. . . .	1,974	323,295	67.3	163.7	29,933	182.77
Waushara . . .	983	211,650	52.7	215.3	35,381	164.32
Winnebago. . .	1,349	199,055	69.4	147.5	50,434	341.79
Wood	1,473	253,281	49.0	171.9	30,977	180.15
STATE	98,973	18,109,273	52.0	182.9	42,448	231.99

---

[1] Includes value of lands and buildings.

Source: U.S. Bureau of the Census, Census of Agriculture, 1969: Wisconsin, Vol. 1, Pt. 14, February 1972. Wisconsin Statistical Reporting Service, 1969 Wisconsin County Summaries.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 8 - Values and Attitudes

ORIENTATION Land Use Conflict

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Using copy, type and proofread, then compose answers to questions on land use interests.

Affective:

Aware of the environmental problems of land use as indicated by composed responses.

Skills Used:

1. Typing speed and accuracy.
2. Proofreading.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Using copy, do timed typing of one and three minutes; proofread and correct copy.

B. Set copy aside and compose at the typewriter answers to these questions:

   1. What is meant by a "dynamic balance" between public and private land use interests?
   2. Can you give an example of a public interest superceding private use?

Outside or Community:

A. View the filmstrip series, Conservation of the City.

   I. Type a summary of your feelings or response from viewing the filmstrips.

B. Could invite City Planner to speak to class.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Pamphlets and booklets from Wisconsin Department of Natural Resources. Free booklets from U. S. Dept. of Agriculture. **Audio–Visual:** Films: Land Betrayed, BAVI Land, BAVI Filmstrip: Conservation of the City, ICE RMC, FS St 18 **Community:** City Planner	

Contemporary concern with land use must always 10
be mindful of the need to maintain a proper balance 20
between the inherent rights of people in private prop- 30
erty and the broader public interest in how land use 40
affects the common good. It is a dynamic balance, 50
changing as perception of societal needs change. Yet 60
it is a balance that is always restrained by the limits 70
of constitutional private property rights. 77

Through the years, court decisions have acted to 87
define the legitimate uses allowed local governments, 97
as well as the limitations imposed upon them, in exer- 107
cising their land regulation authority. Local govern- 117
ments and private landowners have come to understand 127
the extent to which regulation legitimately may be used 137
to promote the "health, safety, morals or general wel- 147
fare of the local community." 153

From: Wisconsin Land Resources Committee, "A Balance
Between Public and Private Property Rights"
February, 1973.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

Integrated with:

CONCEPT NO. 8 - Values and Attitudes

SUBJECT Business Education

ORIENTATION Humanistic Environmental Attitude

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Given environmentally-oriented manuscript copy, prepare an acceptable type-written manuscript and a two-paragraph composition relating to the manuscript--manuscript acceptability to be judged by the instructor.

Affective:

Understands and applies a value criteria in making choices on personal needs that have an environmental impact as demonstrated by composition.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Manuscript. Prepare a typewritten manuscript, using accepted manuscript rules, of the attached essay, "Learning to Become Impossible".

B. Prepare a rough draft relating to your thoughts about the manuscript; specifically, "What Do You Get?".

C. Use proofreader's marks to correct or re-structure your rough draft. Type a two-paragraph (minimum) final copy from your rough draft.

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: **Audio–Visual:** **Community:**	

LEARNING TO BECOME IMPOSSIBLE

Take an average human child, and subject him to 12 years of daily prolonged exposure to an environment which does the following:

Confines his body to a very limited territory

Confines his energy to very limited activity

Confines his senses to very limited stimulation

Confines his sociability to very limited interaction with his peers

Confines his mind to very limited experience of and with the world around him

Separates learning from living and doing

Subordinates his initiative to that of others

Assumes his ignorance

Emphasizes his mistakes

Disregards his feelings

What do you get?

From: You Are An Environment, Teaching/Learning Environmental Attitudes, Noel McInnis, August 1972.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 8 - Values and Attitudes

ORIENTATION Humanistic Environmental Attitude

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Given an environmental statement, compose at the typewriter perception of a given statement's meaning.

Affective:

Composition reflects an understanding of change-reaction concept.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Statement--"We Are Capable of Making a Change in Nature Which Necessitates An Impossible Change in Our Own Nature".

B. Prepare a rough draft of your perception of the meaning of the above statement. Double space your copy. Use top half of paper.

C. Use proofreader's marks to correct or restructure your rough draft. Type your final copy from your rough draft. Double space your copy. Use bottom half of paper.

Outside or Community:

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

Environmental:
Integrated with:

CONCEPT NO. 8 - Values and Attitudes
SUBJECT Business Education
ORIENTATION Humanistic Environmental Attitude
TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Given a perception of our environmental problems in manuscript form, prepare an acceptable typewritten manuscript and compose three brief listings of his "wants" given unlimited money, life days and environmental resources.	A. Manuscript. Prepare a typewritten manuscript using accepted manuscript rules of the attached essay, "Finitude". B. Prepare final copy from an initially prepared rough draft listing of your "wants" given the following premise: "Imagine that when you were born you were granted a bank account. Imagine further that this bank account contained all the money you would ever have. Once the money ran out, you would be absolutely unable to gain more from any other source. Imagine, finally, that the amount of money in your account was unknown. You would always know how much you have spent, but you would never know how much was left."[1] (Continued)	
Affective: Develops self-awareness related to human wants and needs and potential environmental impact.		
Skills Used:		

BEST COPY AVAILABLE

SUGGESTED RESOURCES

Publications:

Audio–Visual:

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

C. Prepare final copy from an initially prepared rough draft listing of your "wants" given the following premise:

"Imagine that when you were born you were granted a life account. Imagine further that this life account contained all the days you would ever have. Once the days ran out, you would be absolutely unable to gain more from any other source. Imagine finally, that the number of days in your account was unknown. You would always know how many days you had spent, but you would never know how many were left."[1]

D. Prepare final copy from an initially prepared rough draft listing of your "wants" given the following premise:

"Imagine that when you were born you were granted an environmental account. Imagine further that this environmental account contained all the resources you would ever have. Once the resources ran out, you would be absolutely unable to gain more from any other source. Imagine, finally, that the amount of resources in your account was not accurately known. You couldn't really even compute how many resources you had spent, let alone figure out how many were left."[1]

---

[1] You Are An Environment, Teaching/Learning Environmental Attitudes, Noel McInnis, August 1972, pp. 61-62

FINITUDE

Everything we use and have comes from somewhere on the planet. When we are done with it, it has to go back to someplace else on the planet. If there are too many people on the planet, or if we accumulate too many things, then everything we throw away will be in somebody else's way--and their cast-offs will be in *our* way. One environmentalist has announced that there are already so many people on the planet that there is no longer any such place as "away" to throw things.

From: *You Are An Environment*, Teaching/Learning *Environmental Attitudes*, Noel McInnis, August 1972.

Environmental:

CONCEPT NO. 9 - Management

ORIENTATION Management of Environmental Change

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Given environmentally-oriented manuscript copy containing a centering problem, prepare a manuscript and compose at the typewriter a response to questions about the manuscript copy.

Affective:

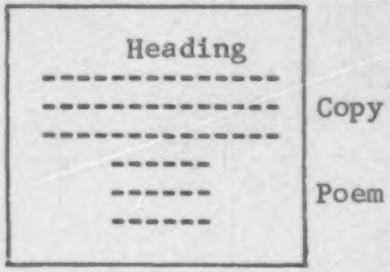
Gains perspective on the potential each person has to manage wisely earth's resources through composition responses.

Skills Used:

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Manuscript. Prepare a manuscript, using accepted rules, of the attached copy, Environmental Protection, "The Best Things in Life Are Free".



B. Composition. Describe in a personal letter to a friend how a favorite childhood haunt like a tree (apple tree?), creek, vacant lot, field, woods or pond has been altered by "progress". Prepare final copy from an initially prepared rough draft.

C. Composition. In the poem, "Robin Hood":
(Continued)

Outside or Community:

BEST COPY AVAILABLE

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	CLASSROOM (Continued) 1. What is this poem trying to convey? 2. Why is the reference to Robin Hood significant? 3. How can green belts be retained, not destroyed by "progress"? 4. What responsibility does the average citizen have to discourage this short of reversal.
Audio–Visual:	
Community:	

"THE BEST THINGS IN LIFE ARE FREE"

There is a saying, made popular by a depression-era song, that "the best things in life are free."

In the moon-June tradition of Tin Pan Alley, the songwriter concentrated on love. Let's extend this to material blessings. Certainly we would include water and air and the wide-open spaces. These are the essentials of life.

But, as a nation, we have abused our freedoms. As a result, the "best things" are no longer free.[1]

Consider for a moment the following poem by Eve Merriam:

Robin Hood[2]

has returned
to Sherwood Forest
as
Secretary of the Interior

and the greenery
is to be preserved
for the public good

directly alongside
the parts reserved
for Hood enterprises

for Sherwood Homesites
Shop-and Sher-Parking Plaza
and
Sherburger Franchises

---

[1] Environmental Protection by Thomas G. Frangos, Acting Administrator, Division of Environmental Protection, 1968

[2] Environmental Education Activities, Milwaukee Public Schools, 1972

Environmental:

CONCEPT NO. 11 - Individual Acts

ORIENTATION Environmental Participation

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Given environmentally-oriented manuscript copy, prepare a manuscript and compose at the typewriter a response to questions about the manuscript copy.	A. Manuscript. Prepare a manuscript, using accepted rules, of the attached copy, "Environmental Process". B. Composition. Identify an imbalance in one of the above environmental factors that you have observed. Describe the effort of the imbalance on each of the other environmental factors.	BEST COPY AVAILABLE
Affective: Comprehends the role of the individual in environmental factors and assumes a responsible role for improvement in the composition.		
Skills Used:		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

ENVIRONMENTAL PROCESS

It is obvious that all of us are active participants and potential victimizers of our environment. It is interesting to note that we generally relate to our environment as if it were (and we are) a thing, rather than a process which inter-relates things. This process utilizes the following environmental factors: nature...culture...technology...people...ideas...feelings. None of the above environmental factors exist alone. Each factor is constantly interacting--changing the significance of the other factors. You don't fully understand one factor without considering everything else that relates to it. When we talk about the process of our environment, we then are talking about the interaction and effect each environmental factor has on the others.

Because a change in any of the environmental factors creates the possibility of an imbalance in other factors, we must carefully consider our actions, change and "progress". We must implement our actions in a manner which allows us to satisfy our own best interests without creating an imbalance in one or more of the other factors. We cannot serve our own best interests in a way which does not allow us to act for the good of the total environmental process.

Environmental:

CONCEPT NO. 11 - Individual Acts

ORIENTATION Environmental Participation

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:
Given environmentally-oriented manuscript copy containing listings, prepare an acceptable manuscript and compose at the typewriter his perception of acceptable individual environmental actions.

Affective:
Recognizes and strives for acceptable individual environmental actions as demonstrated by composition.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Manuscript. Prepare a manuscript, using accepted rules, of the attached copy, "Actions".

B. Composition. Select two of the following activities and prepare final copy from an initially prepared rough draft.

1. What activities do you currently practice in the above listing? Why do you support the activity?
2. Considering both home and school as part of your environment, what practices could be added to this listing?
3. In order to secure compliance with some of the practices in the listing, it has been necessary to threaten and/or punish to secure

(Continued)

Outside or Community:

SUGGESTED RESOURCES

Publications:

Audio–Visual:

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

desired results. How do you react to this? What would we do to change this method of securing compliance?

4. Do you oppose any of the ideas suggested in the listing? Why?
5. From your knowledge of the effect of individual acts on the environment, respond to the following equation:

   D = N x I (Damage to the earth equals number of inhabitants multiplied by their negative impact)

6. Explain the following: "A beer can in a vacant lot needs a dump."
   a. When is a recreation area destroyed because too many people use it?

ACTIONS

There are a lot of things, practical or significant and sometimes both, that individuals and families can do. Some of them both indicate that a value-change is taking place and help to effect it. That means that they may go against the "consume, consume" grain. Or they may make one appear as a prophet of doom. At any rate, they are a beginning. The suggestions below have been taken from several sources and are listed in a random order. Pass them on.

1. When you have a choice between a returnable and a non-returnable container, buy the former and let people know why.
2. Save paper of all kinds for paper drives. Recycling is one way to keep from being buried in our own wastes.
3. Bring shopping bags and sacks to the store with you.
4. Give away what you don't want anymore. If someone else is using what was yours, there will be the need for one less thing in the world.
5. Buy at second hand stores.
6. Buy food in bulk, share it with friends if possible. Save on package waste.
7. Use detergents with the lowest phosphate content--avoid turning our rivers and oceans into washing machines. Ivory Snow, Lux and Vel have no phosphates at all. Some low-phosphate heavy-duty cleaners include: Diaper Pure, Wisk, Cold Water All. High phosphate detergents include Axion, Biz, Salvo, Oxydol, Tide and Bold.

8. Avoid enzyme detergents. Recent studies indicate they may be dangerous when used over long periods of time.
9. Walk more and use a bicycle; take public transportation when these won't do.
10. Buy lead-free gasoline.
11. Plant trees and shrubs.
12. Check out pesticides thoroughly before using.
13. Organize boycotts of polluters. They are hurting your air and water and land (or making too much noise); you can hurt their business.
14. Study Senator Packwood's (R. - Ore.) bill to end tax deductions for any more than two children.
15. Support the constitutional amendment guaranteeing the right to a clean environment.
16. Organize symbolic liturgies: bury an internal combustion engine; let the pall bearers wear gas masks.
17. An anti-pollution parade: wagons, bikes, trikes, skates, scooters and just plain walking.
18. Leaflet, sell buttons and bumper stickers.
19. Make pollution an honest campaign issue this fall.
20. Look into the curriculum of local schools.
21. The Ecology Center in Berkeley sponsored a non-conference on the environment last January. "We are holding this Conference in order to find new and effective solutions to the massive problems now threatening the planet. We are inviting leading men and women in the fields of conservation, ecology, science, business and government to do nothing for a whole Saturday and Sunday. Please

stay at home. Do not consume jet fuel or rent cars. Do not write papers or read papers. Walk your dog; sit in the sun or talk with your children. Do not think--just be."

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION The Ethics of Land Use

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES In-Class:	STUDENT–CENTERED LEARNING ACTIVITIES Outside or Community:
Cognitive: Given environmentally-oriented manuscript copy, prepare an acceptable typewritten manuscript and a short argumentative essay relating to the manuscript copy.	A. Manuscript. Prepare a typewritten manuscript, using accepted manusrules, of the attached essay, "Thoughts on a Land Ethic". B. Composition. In his Sand County Almanac, Aldo Leopold discusses the land ethic, insisting "Land doesn't belong to man; it's a community to which man belongs". Compose at the typewriter, final copy from an initially prepared rough draft, an essay to support or refute Leopold's statement.	**BEST COPY AVAILABLE**
Affective: Shows through composition understanding of the concept of a viable land use ethic.		
Skills Used:		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

THOUGHTS ON A LAND ETHIC

Conservation is getting nowhere because it is incompatible with our Abrahamic concept of land. We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man, nor for us to reap from it the esthetic harvest it is capable, under science, of contributing to culture.

That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics. That land yields a cultural harvest is a fact long known, but latterly often forgotten.

Such a view of land and people is, of course, subject to the blurs and distortions of personal experience and personal bias. But wherever the truth may lie, this much is crystal-clear: our bigger-and-better society is now like a hypochondriac, so obsessed with its own economic health as to have lost the capacity to remain healthy. The whole world is so greedy for more bathtubs that it has lost the stability necessary to build them, or even to turn off the tap. Nothing could be more salutary at this stage than a little healthy contempt for a plethora of material blessings.

Perhaps such a shift of values can be achieved by reappraising things unnatural, tame, and confined in terms of things natural, wild, and free.

Taken from: A Sand County Almanac, Aldo Leopold

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION The Ethics of Land Use

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES	STUDENT–CENTERED LEARNING ACTIVITIES	
	In-Class:	**Outside or Community:**
Cognitive: Given environmentally-oriented manuscript copy containing listings, prepare both a typewritten manuscript and perception of the necessity of maintaining our land to provide for the habitat required by wildlife.	A. Manuscript. Prepare a typewritten manuscript with listings, using accepted manuscript rules, of the attached copy, "Wildlife--Our Neglected Citizens". B. Composition. Select one or two of the ideas presented in the manuscript and compose at the typewriter your feelings about the necessity for providing for, what you have done to specifically implement, or what you have observed which tends to defeat a stated "good practice". Compose your final copy from an initially prepared rough draft.	BEST COPY AVAILABLE
Affective: Demonstrates through composition an appreciation for wildlife and the need to preserve natural areas.		
Skills Used:		

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

WILDLIFE--OUR NEGLECTED CITIZENS

All wildlife require four essentials: cover, food, water, and living space. In combination, these are called habitat. By destroying habitat through poor land use, creation of air, water, and land pollution, man had made it impossible for most wildlife to live in his communities. A healthy and balanced community for man will by nature provide a suitable environment for wildlife.

1. Create habitat: thick hedge rows, community forests, nature preserves and ponds. Provide birdhouses, nesting platforms, squirrel boxes, artificial burrows and runways. Preserve hollow den trees and community marshes and wetlands. Plant wildlife foods--particularly large grain and berry plants, nut and fleshy fruit trees.

   Promote the study of your community's wildlife and its habitats in your school system.

   Inventory your community's wildlife resources and assist your municipal advisory council for environmental conservation in preserving essential habitats.

2. Bell cats.

3. Do not kill snakes. They prey on insects and rodents.

4. Know and abide by state and federal fish and game laws.

   Encourage farmers to install flushing devices (metal fingers which scare away wild animals) on their farm implements, especially sickle bars and mowing machines.

5. Do not keep exotic pets. Do not be an accomplice to the cruel trade in wild animals.

6. Do not buy shoes, belt, hats or any clothing made from the skins or feathers of endangered species of animals--particularly the wild cats such as leopard, cheetah, jaguar; the alligator and crocodile; the wolf and polar bear. If you do buy such items, you are probably supporting poaching and illegal marketing rings and are threatening the survival of these species. Support endangered species laws.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION The Ethics of Land Use

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Typing I, II, Personal

BEHAVIORAL OBJECTIVES

Cognitive:

Given an environmentally-oriented question regarding land ethics, compose at the typewriter his response to the question.

Affective:

Indicates through responses a perception of the ethic that man also needs places restful and beautiful to be fully human.

Skills Used:

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Statement. When many people are allowed to use common lands for recreational purposes, what special responsibilities must they assume for this privilege?

B. Composition.
   1. Compose at the typewriter a short response to the above question.
   2. Do you know from your experience a great place for "getting away from it all" which is currently being victimized by tourists. Compose a short essay about this location and what's happening to it.

Outside or Community:

A. A solo experience (20 minutes of reflection) in some accessible natural area to stimulate thought in response to the question on "a place to get away from it all".

BEST COPY AVAILABLE

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications:	
Audio–Visual:	
Community:	

Environmental:

CONCEPT NO. 1 - Energy

ORIENTATION Power Consumption

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:

Given dictation, write in shorthand and transcribe answers to energy use questions.

Affective:

Answers to transcriptions show understanding of energy demands to prompt conservation.

Skills Used:

1. Points of communication:
   a. Punctuation.
   b. Capitalization.
   c. Numbers.
   d. Hyphen.
   e. Oral discussion.
   f. Vocabulary.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. "Earth energy" dictation copy is provided:
   1. Students transcribe dictation, checking capitalization, spelling and punctuation.
   2. Students write in shorthand and transcribe their answers to the questions:
      a. What are the two basic kinds of energy? (Answer: natural and man-developed)
      b. What is a possible example of human error in energy introduction? Describe. (Answer: Nuclear)

Outside or Community:

A. Invite to class to question or interview a power company representative on energy demands.
   1. Develop a list of questions.
   2. Take answers in shorthand.
   3. Transcribe answers in a brief report.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Current newspapers, periodicals, and pamphlets found in school library on energy. Your Life Depends on the Sun, National Wildlife Magazine for October-November, 1971, p. 10 **Audio—Visual:** **Community:** Representative in energy resource	

Dictation Copy

"Like all organisms, Earth metabolizes energy. It metabolizes all kinds of energy, those which are available in nature as well as those which humans introduce. It is our planet's energy-metabolizing systems which account for our existence and sustenance as the most complexly-ordered life phenomenon in the universe presently known to us. But it is also these very same systems which have made us the planet's most threatening life phenomenon. The planet's metabolism can compound error as well as success. And from the perspective of a whole Earth, man has committed several errors...."

From: You Are An Environment, Noel McInnis, Center for Curriculum Design, 1972, p. 67.

Environmental:

CONCEPT NO. 2 - Ecosystem

ORIENTATION Balance of Nature

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:
Write in shorthand, transcribe, spelling correctly a list of environmental terms.

Affective:
Demonstrates understanding of environmental terms and relation to ecosystem through exercise performance.

Skills Used:
1. Spelling.
2. Taking shorthand notes.
3. Shorthand outline construction.
4. Vocabulary.
5. Typing.

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Given a list of environmental terms:
  1. Students will be given a spelling test.
  2. Students will be taught, by use of an overhead or chalkboard, to illustrate the proper procedure in writing the environmental terms in shorthand.
  3. View the filmstrip series: The Environment of Man; An Introduction to Ecology available at ICE RMC.
  4. The class will then discuss the meanings of environmental terms and their correct use.
  5. Students will construct three sentences using the terms discussed in class.

Outside or Community:

A. Students will research the origin of the environmental terms discussed in class. Use the library.

SUGGESTED RESOURCES

Publications:

Current newspaper articles in which certain environmental terms are used.

Investigations into Ecology, ICE RMC, 110 Ec

Interactions and Systems, ICE RMC, 110 Br

Audio–Visual:

Film:
This Vital Earth, BAVI
Game:
Ecology: Game of Man and Nature, ICE RMC, SG 2
Filmstrip:
The Environment of Man: An Introduction to Ecology, ICE RMC, KT 2

Community:

DNR representative

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

Partial list of words:

- Ecology
- Environment
- Ecosystem
- Pollution
- Recycling
- Biomes
- Land ethic
- Pesticides
- Limnology
- Herbicides
- Toxic
- Conservation
- Resources
  - Natural
  - Renewable
- Photosynthesis

Environmental:

CONCEPT NO. 3 - Carrying Capacity

ORIENTATION Population Demands

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:
Correctly compose shorthand outlines from written environmental material on population demands.

Affective:
Develops insight on various environmental population concerns as a result of the activity.

Skills Used:
1. Research skill.
2. Group interaction.
3. Shorthand outline.
4. Construction.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Given an advance notice to look for appropriate articles:
   1. Students will bring in an article about some type of environmental management techniques dealing with population demands.
   2. Using shorthand skills previously learned, have students write the above mentioned article in shorthand.
   3. The class will discuss the articles about environmental management techniques.
   4. Students will type shorthand notes in manuscript style.

Outside or Community:

A. Use library to help prepare and find articles.

B. Students gather materials for a bulletin board titled "Carrying Capacity". Might deal with several species--human, animal, etc.
   1. Sources.
      a. Industry.
      b. DNR.
      c. Business.
      d. Land developer.
   2. Students will prepare all titles for bulletin board in shorthand figures.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: **Audio–Visual:** Films: *Challenge to Mankind*, BAVI, #0330 *Men at Bay*, ICE RMC, Film #250 **Community:** DNR Industry Business	

Environmental:

CONCEPT NO. 4 - Water

ORIENTATION Water Quality Concerns

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:

List things they observed or heard on water pollution and methods of improvement.

Affective:

Appreciate the need for clean water and the steps being taken to preserve clean water by the questions asked.

Skills Used:

1. Shorthand notes.
2. Transcription.
3. Punctuation.
4. Capitalization.
5. Report forms.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Students will view a film, The Gifts, (or other water quality film as available).
   1. Notes taken on the film in shorthand.
   2. Notes transcribed.
   3. Write an impression summary in long hand and transcribe to shorthand.

B. Students dictate letters on water quality concerns to each other.
   1. Address to some appropriate local or national official.
   2. Transcribe and type.
   3. Sending optional.

Outside or Community:

A. Field trips or industrial visit to area plants which use water extensively.
   1. Prepare a list of questions.
   2. Take responses in shorthand.
   3. Transcribe for class report.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Everyman's Guide to Ecological Living Water is Everybody's Business The Environmental Crisis all available at ICE RMC **Audio—Visual:** Films: Littering, DNR, Madison, WI The Gifts, ICE RMC, Film #280 Kit: Ecology: Water Pollution, ICE RMC, KT 12 **Community:** Speakers from a: paper mill. cannery. milk plant. sewerage treatment plant.	

Environmental:

CONCEPT NO. 5 - Air

ORIENTATION Air Pollution Concerns

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:
List effects air pollution has on our lives and the ways in which steps are being taken to control it.

Affective:
Appreciate the need for clean air and realize that steps are being taken to control air pollution.

Skills Used:
1. Transcription.
2. Punctuation.
3. Capitalization.
4. Proofreading.
5. Composition
6. Dictation.
7. Spelling.
8. Research.
9. Typing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Show any of these suggested media: Air Pollution and You, Topics in Ecology: 5 Single Concept Lessons, or film The 2nd Pollution.
   1. Students take notes in shorthand.
   2. Transcribe and report major concerns to class.

B. Students, with some research, will compose a letter to companies in Northeastern Wisconsin, asking businessmen what they are doing about air pollution.
   1. Upon revision and selection of the ten best letters, the teacher will dictate them to the class.
   2. Students will transcribe shorthand notes, type and proofread.
      a. Prepare letters for mailing.
      b. Actual mailing optional.

Outside or Community:

A. Speakers from local industries.
   1. Paper mills, car dealers, etc.
   2. Students will take notes on speeches in shorthand and transcribe.

B. Field trips to local paper mill to observe the amount of air pollution and the controls being used.
   1. Students will take shorthand notes and transcribe later in the classroom.

C. Bulletin board will be prepared from letters and returned answers. Titles can be prepared in shorthand.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Clean Air For Your Community, ICE RMC, VF Take Three Giant Steps to Clean Air, ICE RMC, VF Air Pollution--Where Are We Going, ICE RMC, VF **Audio-Visual:** Filmstrip: Air Pollution and You, Modern Talking Picture Service, Inc., Chicago Kit: Topics in Ecology: 5 Single Concept Lessons, ICE RMC, KT 1 Film: The 2nd Pollution, ICE RMC, Film #460 **Community:** Industry leaders. Auto sales businessmen. Trucking firms. City official in charge of health conditions in given community.	

Environmental:

CONCEPT NO. 6 - Resources

ORIENTATION Depletion and Abuse

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:

List concerns of resource depletion and environmental deterioration and what is Wisconsin doing about recycling.

Affective:

Aware of Wisconsin's present status in resource depletion and recycling efforts.

Skills Used:

1. Interview techniques.
2. Shorthand note taking.
3. Group interaction.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. View selected portions from filmstrip set, Saving What's Left.
   1. Record impressions in shorthand.
   2. Transcribe and write a brief summary.
   3. Brief class discussion on some major consensus item.

B. Dictation copy: Wisconsin Looks at Recycling.
   1. Transcribe dictation.
   2. Prepare brief report.

C. Added activities.
   1. Take part in a mock interview.
   2. Leadership role could be developed. Have a panel discussion.

Outside or Community:

A. Interview a DNR representative for opinions on victimizing the residents of Wisconsin on our natural resources.
   1. Sample questions:
      a. What is being done in the forest management area?
      b. What are some of our wildlife and fish management problems?
      c. Is the water pollution problem improving?
   2. Take notes in shorthand and bring to class for transcribing.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: The Environmental Crisis, Will We Survive?, ICE RMC, 100 My **Audio–Visual:** Filmstrip: Saving What's Left, ICE RMC, KT 28 Game: Man in His Environment, ICE RMC, SG 4 **Community:** DNR representative	

Dictation Copy

WISCONSIN LOOKS AT RECYCLING

Practical answers to the question of how and when full-scale recycling can become an actuality in Wisconsin are being explored by the Department of Natural Resources, the Department of Local Affairs and Development, the Governor's Recycling Task Force on Solid Wastes, University of Wisconsin research scientists and engineers, regional agencies like the Southeastern Wisconsin Regional Planning Commission and county and local governing boards.

The Governor's Recycling Task Force on Solid Wastes, created by executive order on July 15, 1971, was charged with developing a plan for centers to recover, reclaim and recycle solid wastes in Wisconsin. In its final report of February 29, 1972, the task force recommended that the state begin a long-range, evolutionary dovetailing of present waste disposal with a statewide system of regional recycling centers. Consolidated recovery points would provide a sufficiently steady, massive flow of metal, glass, paper, rubber and other matter. As a first step the task force called for a preliminary engineering study of waste sources, quantity and content; collection and transport; location, size and financing of recycling centers and availability of markets.

It was recommended that a Wisconsin Solid Waste Recycling Authority be created upon completion of the engineering study, empowered to plan, design, finance, construct, operate and perform all other acts necessary to provide physical facilities best suited to local and regional needs. Alleviation of the impact of transportation costs on the economics of collection and recycling was urged, through tax incentives, legislation on transportation rates or other means.

A 4-year consummation timetable was recommended:

Recycling Task Force report	February 1972
Executive and legislative action. .	March 1972
Preliminary engineering report. . .	March 1973
Final financing stage	March 1974
Final engineering plans, specifications, phased construction	March 1974 to March 1975
Operation of centers starts	March 1975

Funds to start the engineering studies were incorporated in Governor Lucey's original 1971 budget review bill, but were eliminated in the amended version finally enacted. However, the State Board on Government Operations approved a $200,000 appropriation for the studies after the Legislature adjourned in March of 1972, and a 3-member board of consulting engineers began their preliminary study of the feasibility of state-run recycling centers in May that year.

From: Blue Book, The State of Wisconsin, 1973, p. 153.

Environmental:

CONCEPT NO. 9 - Management

ORIENTATION Destroying Natural Resources

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:
State ways man is polluting wilderness areas in a report.

Affective:
Understands why wilderness areas are needed in a world of change as demonstrated by his report.

Skills Used:

1. Research for materials.
2. Note taking in shorthand.
3. Typing skill of composing.
4. Grammar.
5. Proofreading for result of project.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Show a filmstrip on environmental change: Crisis of the Environment, ICE RMC.
   1. Students take shorthand notes during showing.
   2. Transcribe and write on their thoughts.
      a. Report could be in factual form for panel discussion set-up.
      b. An essay report for bulletin board display.
   3. Use reports by panel leaders in discussing the lesson and class participation.

Outside or Community:

A. Research articles on what is taking place in our environment.
B. Bulletin board display developed from gathering materials for area.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: The Traffic Jam, ICE RMC, VF **Audio–Visual:** Filmstrip: Crisis of the Environment, ICE RMC, KT 6 **Community:** DNR representative.	

Environmental:

CONCEPT NO. 10 - Economic Planning

ORIENTATION Economic Exploitation

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:

Name specific ways in which economic exploitation is occurring in each of the eight areas named through a report.

Affective:

Recognize ways to combat this exploitation or at least to curb it as demonstrated in a report.

Skills Used:

1. Shorthand outline.
2. Research.
3. Group interaction.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Have students bring in an article concerning economic exploitation in relation to:
   1. Air.
   2. Wildlife.
   3. Water.
   4. Soil.
   5. Timber.
   6. Living space.
   7. Minerals.
   8. People.

B. Discuss the articles and then transcribe them into shorthand.
   1. Summarize impressions in a brief report.

Outside or Community:

A. Invite or interview local speakers concerning any one of the eight areas. Examples: DNR, paper mill personnel, Coast Guard, lumberman, farmer, doctor.
   1. Record answers or interview in shorthand.
   2. Transcribe for class report.

BEST COPY AVAILABLE

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES

Publications:

Newspapers, magazines or books concerning articles on environmental conditions.
Pollution, Property and Prices, ICE RMC
Material Objects, ICE RMC, 110 La

Audio–Visual:

Films:
Bulldozed America, BAVI, #6429
The Gifts, ICE RMC, Film #280
Kit:
Environmental Quality Index - America Is In Trouble, ICE RMC, KT 9

Community:

Speakers from:
DNR
Coast Guard
Paper mill

BEST COPY AVAILABLE

Environmental:

CONCEPT NO. 11 - Individual Acts
12 - Stewardship

ORIENTATION Seeking Solution to Pollution Problems

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Shorthand

BEHAVIORAL OBJECTIVES

Cognitive:

Compile a list of local polluters and project action letters for attention to and correlation of observed problems.

Affective:

Through activity design, shows concern, individual or group, for environmental problems and is prompted to act on them.

Skills Used:

1. Shorthand outline.
2. Typing.
3. Researching.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. View filmstrips and listen to records of the kit: Topics in Ecology: 5 Single Concept Lessons.
  1. Students compile a list of local polluters:
    a. In the city.
    b. On the highway.
    c. In waterways.
    d. In wooded areas.
  2. Students compose letters to appropriate local, state or federal official citing pollution area, giving specific data and requesting action.
  3. Students dictate letters to each other for shorthand exercise.
  4. Selected best letters and data forwarded to appropriate official (optional).

Note: Use sample "Pollution Watch" format or develop own data sheet.

Outside or Community:

A. Have students interview local businessmen, industrialists, or DNR representatives on pollution abatement problems and controls.
  1. Responses taken in shorthand.
  2. Responses transcribed into brief class report.

BEST COPY AVAILABLE

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: A Sand County Almanac, ICE RMC, 100 Le Air and Water Pollution, ICE RMC Audio–Visual: Film: Troubled Waters, U.S. Senate Public Works Committee, Washington, D.C. Kit: Topics in Ecology: 5 Single Concept Lessons, ICE RMC, KT 1 Community: Local business leader DNR representative	

Sample Newspaper Report Form

POLLUTION WATCH

It's Your Fight to a Better Environment

Do you know of pollution where you live, work or spend your recreational hours - in the city, on the highways, in waterways or in wooded areas? If you do, report it to your local newspaper. Information you supply will be relayed to the agencies charged with protecting our environment.

Pollution Watch
Name & Address of
your local newspaper

Type of pollution:

Water ______________________________

Air ______________________________

Litter ______________________________

Other ______________________________

Names, Addresses, Dates, Times, License No., Location, Comments.

____

____

____

____

____

- -

Additional Information:

Name ______________________

Address ______________________________

Telephone ____________

(Your report will be kept confidential if you desire.)

Environmental:

CONCEPT NO. 2 - Ecosystem

ORIENTATION Achieving Stability

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:

Establish an analogy between the assets, liabilities and the proprietorship of our economic system and it parallels to an ecosystem.

Affective:

Stimulate curiosity about equation correlation: assets, liabilities and proprietorship, and the way it is used in an ecosystem.

Skills Used:

1. Problem solving.
2. Decision making.
3. Planning work.
4. Conclude the above skill into a final report.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Review fundamentals of bookkeeping and the uses of this thinking on the environmental concept: "Natural resources minus industrial and human depletion, equals environmental status.

B. Students will write comments concerning before-mentioned equation as an assignment. At the next meeting:
   1. Students orally voice their opinion from notes, regarding the changing of this equation to meet new environmental changes. (eg. - Slow down use of resources.)
      a. Tape record oral discussion.
      b. Play back remarks and stop tape when a remark is needed.

Outside or Community:

A. Have a speaker come in and talk on the problem of "depletion" of any particular natural resource in the local community such as:
   1. Ag. agent and farm attrition.
   2. Tourist office and polluted beaches.
   3. Fisherman and disappearance of any species.
   4. Lumberman and depleted forests.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Any bookkeeping or accounting textbook. Business publications as to results of operation. **Audio-Visual:** Film: Seeds of Destruction, BAVI, #3327 Filmstrip: Ecology: Interaction and Environments, ICE RMC, FS St 16 **Community:** Speaker from a business using natural resources.	

Environmental:

CONCEPT NO. 3 - Carrying Capacity

ORIENTATION Carrying Capacity

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:

Explain orally, using specific examples, the value of natural resources to business success.

Affective:

Shows understanding of complexity of relationship between assets and liabilities in businesses that face financial difficulty because of limited natural resources.

Skills Used:

1. Problem solving.
2. Brainstorming.
3. Letter writing.
4. Discussion.
5. Analyze balance sheet.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Start with concept: "A business losing their natural resources will soon go bankrupt or face financial difficulty. Solutions:
   1. Could analyze balance sheet. Students can see how assets (land, buildings, machinery) take care of the liabilities and expenses.
   2. Alternate route: Should a business borrow more money and go deeper in debt to solve problems or convert machinery to use a different resource?
   3. Hire research firm.

B. View filmstrip: Saving What's Left available from ICE RMC.

Outside or Community:

A. Have students write letters to Federal Small Business Administration asking about loans to financially-troubled small businesses.

B. Field trip to local industry that uses one or more local natural resources. Use to show both business principles and environmental principles.

BEST COPY AVAILABLE

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Man's Control of the Environment, Congressional Quarterly, 1970, ICE RMC, 110 Ma The Limits to Growth, Donella H. Meadows, Universe Books **Audio–Visual:** Kit: Saving What's Left, ICE RMC, KT 28 **Community:** Field trip to local business or industry.	

Environmental:

CONCEPT NO. 6 - Resources

ORIENTATION Profit Analysis and Plant Location

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:

Prepare graphic report on differences between production costs between various area communities.

Affective:

Begin to show appreciation for problems confronting business and industry and availability of natural resources.

Skills Used:

1. Letter writing.
2. Interviewing.
3. Analysis of annual reports.
4. Preparing written reports.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Compare and contrast, in graph report, the revenue, costs and expenses of plants or factories producing similar products in different locations.
    1. Note the following for comparison--purchases, freight cost, labor cost and overhead cost.
    2. Contrast between nearby larger urban and local area, or a smaller city or village.

B. Write a final report as to why various companies are located in their present locations.

Outside or Community:

A. Invite someone from the marketing department of a local firm to speak on plant location.

B. Many communities have an agency or committee, i.e., Chamber of Commerce, whose main task is to promote the community to attract new business or industry. Invite to class or interview such a representative on their sales pitch to attract such new business or industry.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: American Petroleum Institute: Bulletin board displays on natural resource locations in the United States. **Audio–Visual:** Film: Harmony, ICE RMC, Film #340 Kit: Focus on America's Northwest, ICE RMC, KT 15 **Community:** Resource leaders of area to explain why their firm is located in given area and their source of raw material or market.	

Environmental:

CONCEPT NO. 7 - Land Use

ORIENTATION Leisure Time - Business

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:
Investigate and prepare a report and budget for establishing a leisure-type business.

Affective:
Aware that development of recreational/leisure time activities will have an environmental impact which must be considered and may even be regulated now and in the future.

Skills Used:
1. Problem solving.
2. Group research.
3. Investigation.
4. Writing a report.
5. Oral reporting.
6. Civic responsibility.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Students split up into small groups representing leisure types of business in barren areas of the country.
   1. Problem areas:
      a. Income-producing activity.
      b. Cost of land.
      c. Expenses of development including site preparation to meet codes.
      d. Current operating expenses.
      e. Amount to charge customer for activity.
      f. Obtaining financing.
      g. Preparing budget.

B. Have groups report their findings orally to the group and in writing to their instructor.

Outside or Community:

A. Go to library or give an assignment to research leisure type business and land development ventures.

B. Have each group write to a Chamber of Commerce or a state government to find out costs and offers of various communities.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Newspapers. A Place to Live, ICE RMC, 110A Too Many People, ICE RMC, 190 Ki Wisconsin, ICE RMC, VF **Audio–Visual:** Films: One Day at Teton Marsh, ICE RMC, Film #200 Harmony, ICE RMC, Film #340 **Community:** Chamber of Commerce DNR Zoning planning official	

Environmental:

CONCEPT NO. 8 - Values and Attitudes

ORIENTATION Recycling

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping, Distributive Education

BEHAVIORAL OBJECTIVES

Cognitive:

Collect information and prepare a budget showing costs and income of a waste collection business.

Affective:

Promote and support recycling programs in their community.

Skills Used:

1. Problem solving.
2. Group research.
3. Interviewing.
4. Investigation.
5. Planning.
6. Communication skills.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Have students set up a waste collection business.
    1. Divide class into five areas of business.
        a. Paper.
        b. Glass.
        c. Aluminum.
        d. Metal.
        e. Other.
    2. Groups should:
        a. Find out how much income they could receive per ton in each area.
        b. Find out how they could collect, store and then sell to make a profit.
        c. Prepare a budget for their respective area.

Outside or Community:

A. Have each group write, phone or make a personal contact to a waste collection business and find out how much income each could receive per ton in their respective area.

B. Have a student obtain a taped interview from a local government official on any aspects of starting this type of business.
    1. What responsibility does the business community have to aid recycling by providing a market?
    2. What responsibility does the government have to enforce recycling by forbidding the use of "throw aways", etc.?

C. If possible, actually start and run this business on a class or school level.

(Continued)

SUGGESTED RESOURCES

Publications:

Daydreams and Nightmares,
William Busch, 1971
Community Planning Handbook,
ICE RMC, 100 Gi

Audio–Visual:

Films:
Garbage, ICE RMC, Film #260
Men at Bay, ICE RMC, Film #250
Recycling, Modern Talking
Picture Service, Inc., Chicago

Community:

City government officials
Community civic ecology groups
School administration

CONTINUED OR ADDED LEARNING ACTIVITIES

OUTSIDE ACTIVITIES (Continued)

D. Type of questions for student and teacher:
   1. Can a school sponsored program do this in a community?
   2. Kind of collection containers to meet codes.
   3. How long can containers stand before emptying?
   4. What are the disposal procedures in your community?
   5. How are disposal funds obtained?

Environmental:

CONCEPT NO. 9 - Management

ORIENTATION Technology and Growth

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Advanced Bookkeeping, Distributive Education

BEHAVIORAL OBJECTIVES

Cognitive:

Investigate, analyze and report on change in land value in conversion from farm to industry use, and related problems.

Affective:

Justify that industrial expansion is not necessarily progress, that growth brings growth problems as well as benefits.

Skills Used:

1. Problem solving.
2. Researching.
3. Letter writing.
4. Typing.
5. Knowledge of government services.
6. Cost-benefit analysis.

STUDENT-CENTERED LEARNING ACTIVITIES

In-Class:

A. Out-of-class assignment, investigate land value and provide cost analysis on:
   1. Original land.
      a. Production value/year.
      b. Tax return.
      c. Per capita income.
      d. Environmental values.
   2. Land used as industrial site.
      a. Production value/year.
      b. Tax return.
      c. Per capita income.
      d. Developmental cost.
      e. Changes in environmental value.

B. Compare the difference of density in the area and see what amount of density has the most advantages per capita income. Example: Small farmers in Wisconsin average a little over

(Continued)

Outside or Community:

A. What are local industries doing relative to land use in expanding?

B. Prepare a letter to an industrial developer about plans for pollution control.

C. Compare present government service costs to an estimate of the service costs when new industry moves into a community. How to expand services to control pollution. Use balance sheet approach for your comparison.

SUGGESTED RESOURCES

Publications:

Yearbooks: Colliers, Comptons, World Book, Britannica
The Traffic Jam, ICE RMC
DNR publications on air, water, solid waste standards

Audio-Visual:

Films:
Junkdump, ICE RMC, Film #310
The Stream, ICE RMC, Film #320
Harmony, ICE RMC, Film #340

Community:

Land developer
Local zoning official
Local tax assessor
Officials of county government

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

$5,000 per year income. Large farms in Arizona make over $26,000.

1. Do they need industry to come and give them pollution problems and less income?
2. If industry does not pollute the area, will farm income increase?

C. Investigate pollution abatements costs necessary for siting new industry to strictest standards. (California air pollution standards)

Environmental:

Integrated with:

CONCEPT NO. 10 - Economic Planning

SUBJECT Business Education

ORIENTATION Economic Depreciation

TOPIC/UNIT Advanced Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:
Describe, through discussion, the effect of accelerated depreciation on financial statements.

Affective:
Realize there are business problems related to short-term gains vs. long term effects on society.

Skills Used:
1. Analysis of financial statements.
2. Problem solving.
3. Role playing in decisions.
4. Listening.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Student must have prior knowledge of methods of depreciation, tax laws.

B. Discuss the following:
1. Why accelerated depreciation rates?
   - a. Effect on profit and income taxes.
   - b. Effect on cash flow.
2. Questions and answers:
   - a. What does it mean to have accelerated depreciation on income statement?
   - b. Effect on balance sheet?
   - c. Dividends to stockholders?
3. Long-term depreciation on demand for equipment.
4. Corporate goals vs. society goals.
5. What have short-term economic thoughts done to accumulation of unwanted equipment?

(Continued)

Outside or Community:

A. Have a member of a CPA firm discuss methods of depreciation.

B. If possible, have a tax consultant from either state or federal government come to class and discuss depreciation methods.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Tax publications on depreciation--state and federal. Wisconsin Conservation Bulletin, Wisconsin DNR, Madison **Audio—Visual:** Film: What's New in Solid Waste Management?, Modern Talking Picture Service, Inc., Chicago Kits: Aggradation-Degradation, ICE RMC, KT 5 Saving What's Left, ICE RMC, KT 28 **Community:** CPA IRS employee	CLASSROOM (Continued) 6. What has the solid waste from industrial plants done to environmental sites? 7. What has the state of Wisconsin DNR done in handling solid waste? 8. As our stockpile of solid waste grows, what is happening to natural resource deposits? **BEST COPY AVAILABLE**

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION Private Ownership

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Bookkeeping

BEHAVIORAL OBJECTIVES

Cognitive:

Interpret data relative to environmental costs and their long range beneficial effects upon an individual's rights.

Affective:

Recognize that the abuse of "free goods" by businesses is a costly mistake and it will require money to correct. The cost could be passed on to the consumer.

Skills Used:

1. Discussion.
2. Interviewing.
3. Letter writing.
4. Analyzing costs.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Through discussion, identify list of local companies who may have shown concern for pollution.
   1. Select several local business firms.
   2. Send for information from these companies concerning their activities in the area of pollution abatement and the costs during the last five years.
   3. Write a response to the following statement, "Owners of business spend money to conserve the rights of individuals in the long run."

BEST COPY AVAILABLE

Outside or Community:

A. From list identified under "A" in "Inclass":
   1. Invite speakers for the class who will explain what their company has done in the area of environmental protection for the past five years.
   2. Have students mention that this is a bookkeeping class (in the letter) and, therefore, are primarily interested in figures and analyzing these figures.
   3. Have students prepare questions two weeks ahead of time and send questions to the speakers so they can prepare the answers to them.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: Community Planning Handbook, ICE RMC, 110 Gi Environmental Handbook, Garrett De Bell, Ballantine Books, Inc. **Audio–Visual:** Kit: Topics in Ecology: 5 Single Concept Lessons, ICE RMC, KT 1 **Community:** Speakers from area production companies	

Environmental:

CONCEPT NO. 1 - Energy

ORIENTATION Office Consumption of Electricity

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Clerical & Secretarial Practice

BEHAVIORAL OBJECTIVES

Cognitive:

Prepare a list of ways to practice conservation of electricity in their use of electrical office equipment.

Affective:

Awareness of the waste of power in the classroom and in the office and practices economy when operating electrical equipment.

Skills Used:

1. Good habits in use of classroom equipment.
2. Note taking - shorthand in Secretarial Practice - long hand in Clerical.
3. Report typing.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Students discuss equipment in school and offices that use electricity.
   1. Students discuss ways in which waste of electricity occurs:
      a. Forgetfulness.
      b. Poor work habits.
      c. Laziness.

B. A student self-impact project done as a class, by the following steps:
   1. Develop an inventory of all office equipment in the business education department.
   2. From equipment specifications, manuals or inquiry to companies represented, determine electrical consumption per hour for each piece of equipment.
   3. Tabulate results on a chart for the department.

(Continued)

Outside or Community:

A. School business manager or engineer talks to students on cost of electricity for school, broken down into departments, if possible.

B. A business machine representative (IBM for example) talks to students on power usage. Give suggestions for conserving power.

C. An office manager from a local business tells the students about his office operations on power usage.

D. Students type summary on any of the above presentations concerning emphasis on ways of conserving energy through their use of office equipment.

SUGGESTED RESOURCES

Publications:

Audio–Visual:

Film:
Electricity and How It Is Made, BAVI, #6074
Filmstrip:
Ecology and Man, Set I, "Energy Relationship", ICE RMC, FS St 9

Community:

Energy production source and usage in your area:
- Power company.
- Oil company.
- Gas company.
- Office manager.
- Business machines representative.

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

4. Propose electrical energy conservation practices and calculate savings for a period of a month, over what were normal practices.

E. S. E. A. Title III – PROJECT I–C–E 59–70–0135–4

Environmental:

CONCEPT NO. 6 - Resources

ORIENTATION Recycling Paper

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Clerical & Secretarial Practice

BEHAVIORAL OBJECTIVES

Cognitive:
Conduct research on source and products using recycled paper and compose letter of commendation to such firms.

Affective:
Aware that recycling efforts help the environment and demonstrates concern by using recycled products and paper conservation practices.

Skills Used:
1. Composing letters.
2. Proper filing procedure.
3. Dictating skills.
4. Improvement of shorthand vocabulary.
5. Transcription skills.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Students are assigned to research:
   1. Which companies use recycled paper in their products.
   2. The products themselves; notebooks, phone books, etc.
   3. Students prepare a list of companies.
   4. Letters are composed commending companies on their use of recycled paper.

B. Students have project to analyze paper use in their class for one month.
   1. Amount of paper wasted using one side or less.
   2. Total paper consumption in reams.
   3. What happens to all waste paper from the class?

Outside or Community:

A. Students bring in as many samples of recycled paper as he can find, citing:
   1. Where is the paper waste obtained used in recycling?
   2. What difficulties are found in making use of waste paper?

SUGGESTED RESOURCES

Publications:

Trees for Tomorrow camp, Eagle River, Wisconsin
Bulletins of various kinds

Audio–Visual:

Films:
Recycling, ICE RMC, Film #500
Man's Impact on His Environment, BAVI, #2996
Kit:
Environmental Crisis: What The Individual Can Do, ICE RMC, KT 20

Community:

CONTINUED OR ADDED LEARNING ACTIVITIES

Environmental:

Integrated with:

CONCEPT NO. 11 - Individual Acts

SUBJECT Business Education

ORIENTATION Waste of Supplies

TOPIC/UNIT Clerical & Secretarial Practice

BEHAVIORAL OBJECTIVES

Cognitive:
Through project activity report, conclude that inventory control conserves materials.

Affective:
Shows economic practices in using employee's or personal materials.

Skills Used:
1. Prepare charge-out system to know who uses supplies.
2. Inventory control by inventory perpetual.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Student project on inventory control.
    1. Discuss ways of controlling the inventory of supplies.
    2. Explain how supplies can be conserved.
    3. Obtain forms to record inventory.
    4. Record receipts on forms.
    5. Have individuals sign for supplies used and make a record as to usage by individual.
    6. Make an inventory check at end of period.

B. Have class write up:
    1. A program of inventory control as a final report.
    2. A final report on inventory control for personal or business affairs.

Outside or Community:

A. Visit a local plant for materials on inventory procedure.

B. Speaker from local business firm on inventory control.

SUGGESTED RESOURCES	CONTINUED OR ADDED LEARNING ACTIVITIES
Publications: The Only Earth We Have, Pringle, MacMillan Company, New York Urban America, Branson, Scott-Foresman and Company Investigating Man's World, Scott-Foresman and Co. **Audio–Visual:** Films: City and Its Region, BAVI, #5893 Stuff We Throw Away, BAVI, #7923 Kit: Saving What's Left, ICE RMC, KT 28 **Community:** Local businessman	BEST COPY AVAILABLE

Environmental:

CONCEPT NO. 12 - Stewardship

ORIENTATION Identification/Action on Polluters

Integrated with:

SUBJECT Business Education

TOPIC/UNIT Clerical & Secretarial Practice

BEHAVIORAL OBJECTIVES

Cognitive:

Research and prepare report on local industry identifying problems of pollution of water or land.

Affective:

Realizes role individual or group can play in achieving concept of stewardship.

Skills Used:

1. Typing of reports.
2. Organization of data.
3. Researching.
4. Report preparing.
5. Chart preparation.

STUDENT–CENTERED LEARNING ACTIVITIES

In-Class:

A. Suggested team approach with social studies or distributive education.
  1. As an introduction, the students will view the films:
     a. The Stream.
     b. Junkdump.
  2. Students research the industry of the community by preparing a 5" x 7" index card for each industry.
     a. Determine possible violations of land or water by any of the industries.
     b. The student will prepare a chart showing the specific areas of pollution where manufacturers have a responsibility.(Chart on back).
  3. The students will prepare a report to (Continued)

Outside or Community:

A. Students contact local and regional manufacturers to gather information about their effects to control their present pollution level.

B. A group of students (4-5) to contact DNR representative to gather data concerning the state's new anti-pollution laws. (If a Pollution Abatement Commission available, contact them.)

SUGGESTED RESOURCES

Publications:

America the Raped, ICE RMC
The Diligent Destroyers, ICE RMC, 150 La
Pollution, Property and Places, ICE RMC

Audio—Visual:

Films:
The Stream, ICE RMC, Film #320
Junkdump, ICE RMC, Film #310

Community:

Local manufacturer--type will vary with different areas.
DNR representative.

CONTINUED OR ADDED LEARNING ACTIVITIES

CLASSROOM (Continued)

explain chart and predict consequences if present trend continues.

B. Following discussion of the report, class decides which, if any, of this information should be submitted to an area newspaper, legislators, or appropriate agency, i.e. Environmental Protection Agency, followed by composing a cover letter, in appropriate format. (Actual submittal of material and cover letter at class discretion.)

TYPES OF POLLUTION

Name of Company	Water	Evidence	Land	Evidence

(Place a (✓) check in square where a specific type of pollution occurs. Under column heading "Name of Company" list the companies where research was conducted.)